1 October 1993 Change 5 - 15 March 2003

TECHNICAL MANUAL

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA GENERAL WIRING REPAIR PROCEDURES

NAVY MODEL F/A-18A AND F/A-18B 161353 AND UP

This volume is one of two volumes and is incomplete without A1-F18AC-WRM-001.

This volume contains WP001 00 through WP156 00.

<u>DISTRIBUTION STATEMENT C.</u> Distribution authorized to U.S. Government agencies and their contractors to protect publications required for official use or for administrative or operational purposes only, determined on 1 December 1987. Other requests for this document shall be referred to Commanding Officer, Naval Air Technical Data and Engineering Service Command, Naval Air Station North Island, P.O. Box 357031, Building 90 Distribution, San Diego, CA 92135-7031.

<u>DESTRUCTION NOTICE</u> - For unclassified, limited documents, destroy by any method that will prevent disclosure of contents or reconstruction of the document.

Published by Direction of the Commander, Naval Air Systems Command

0801LP1023326

Page A

Change 5 - 15 March 2003

NUMERICAL INDEX OF EFFECTIVE WORK PACKAGES/PAGES

List of Current Changes

Original 0 1 Oc	t 93 C	Change 1	1 Jun 95	Change 2	1 Mar 01	Change 3	15 Apr 02
Change 4 1 Ser	02	Change 5 1	15 Mar 03				

Only those work packages/pages assigned to the manual are listed in this index. Insert Change 5, dated 15 March 2003. Dispose of superseded work packages/pages. Superseded classified work packages/pages shall be destroyed in accordance with applicable security regulations. If changed pages are issued to a work package, insert the changed pages in the applicable work package. The portion of text affected in a change or revision is indicated by change bars or the change symbol "R" in the outer margin of each column of text. Changes to illustrations are indicated by pointing hands, change bars, or MAJOR CHANGE symbols. Changes to diagrams may be indicated by shaded borders.

WP Number	Title	WP Number	Title
Title		036 01	Installation of Ground Terminals, Ring Tongue Crimped
Page A	Numerical Index of Effective Work Packages/pages		Barrel
TPDR-1	List of Technical Publications Deficiency Reports Incorporated	036 02	Installation of Miscellaneous Terminals, Ring Tongue Crimped Barrel
001 00	Alphabetical Index	038 00	Solder Sleeve Installation
001 01	Cable/Wiring Assembly Data Index	040 00	Shielded Terminal Ferrule (High Temperature)
001 02	Reference Designation to Work Package Index	042 00	Prewired Components
002 00	Introduction	050 00	Repair of Silicone Rubber Tape Boots
002 01	Introduction – Part Identification and Wiring	060 00	Fabrication of Shielded Harness Terminated with
002 01	Information	061 00	Electromagnetic Interference (EMI) Backshells Fabrication of Shielded Harness Terminated with
002 02	Introduction – Explanation of Reference Designation and Aircraft Section	001 00	Electromagnetic Interference (EMI) and Tape Wrapped Thermal Barrier Backshells
	Designation System	080 00	Protective Boot Installation for Environmental
002 03	Introduction - Wiring Repair Manual (WRM) Format		Type Connectors with Metal Cable Clamps
002 04	Introduction – How to Use Manual	090 00	Protective Boot Installation for Environmental Type
003 00	List of Materials		Connectors with S3957XXX–34 Molded Plastic Cable
004 00	Wire Type List	004.00	Clamp Backshells
010 00	Stripping Tools	091 00	Tape Wrapped Thermal Barrier Protective Boot Installation for Environmental Type Connectors with
012 00	Soldering Tools – Procedures		Molded Plastic Cable Clamps
013 00	Crimping Tools	100 00	KP-8610-120-602 (MIL-C-39012) Coax Connector
014 00	Insertion and Removal Tool		Repair
015 00	Use of the Time Domain Reflectometer (TDR)	101 00	31–3228–(), 31–3229–(), 31–4229–(), 82–3223–(),
020 00	Installation, Removal and Routing of Coaxial Cable		82–5627–() and 82–5676–1 (MIL–C–39012) Coax
	and Braided Harness Assemblies	104 00	Connector Repair AN3116–2 AN Type Coax Connector Repair
022 00	Sealing of Electrical Cable Assemblies	107 00	M39012/XX–XXX and 1119–079–A721 (MIL–C–
024 00	Sealing of Electrical Components	107 00	39012) N Type Coax Connector Repair
026 00	Repair of Single Conductor Non-Shielded Wire	108 00	19900 (MIL-C-3643) N Type Coax Connector Repair
028 00	Repair of Single Conductor Shielded Cable	111 00	E-7984 and 2115-1-5 (MIL-C-39012) BNC Type
030 00	Repair of Multi–Conductor Shielded Cable		Coax Connector Repair
031 00	Shielded Cable Splice Termination	112 00	M39012–XX–XXXX (MIL–C–39012) BNC Type
032 00	Repair of Shielded/Non–Shielded Braided Wiring Harness	113 00	Coax Connector Repair 39100–10 (MIL–C–39012) BNC Type Coax Connector
033 00	Fabrication of Shielded Wire Harness Terminated with Electromagnetic Interference (EMI) Backshells	117 00	Repair M39012–XX–XXXX and 31–4372–X (MIL–C– 39012) TNC Type Coax Connector Repair
035 00	Splice Combinations and End Caps	118 00	101–T4100A–75 (MIL–C–39012) TNC Type
036 00	Installation of Terminals, Ring Tongue Crimped Barrel	110 00	Coax Connector Repair

Change 5 Page B

WP Number	Title	WP Number	Title
119 00	31-4371-3001 and 31-4371-3009 (MIL-C-39012)	137 00	Data Cable Assembly Replaceable Front Ends
	TNC Type Coax Connector Repair	140 00	31-33449-XX, 31-34179-XX, 5801-XXXX,
120 00	31–34181–2 (MIL–C–39012) Triax Connector Repair		5811-XXXX, and 5813-XXXX (MIL-C-39012)
121 00	4545–6010 (MIL–C–39012) TNC Type Coax		Twinax Connector Repair
122 00	Connector Repair SF4592–6005 (MIL–C–39012) TNC Type Coax Connector Repair	141 00	31–33819–13 and 5841–XXXX (MIL–C–39012) Twinax Connector Repair
123 00	31–8473–5 (MIL–C–39012) TNC Type Coax	144 00	4806–XXXX, 4811–XXXX, 4816–XXXX, 4841–
	Connector Repair		XXXX, and 4846–XXXX (MIL–C–39012) BNC Type
124 00	82–5770, 82–5772–X, 82–5773–X, 82–5967–X and		Triax Connector Repair
	82–5992 (MIL–C–49142) TNC Type Triax Connector Repair	150 00	BJ8–12EXX–XXX (MIL–C–83723 Series 3) with Tape Wrapped Thermal Barrier Protective Boot Installation
127 00	M39012/XX–XXXX (MIL–C–39012) SC Type Coax		Connector Repair
130 00	Connector Repair M39012/XX–XXXX (MIL–C–39012) SMA Type Coax Connector Repair	151 00	L22TF96PN1 and L22TF96S8N1 (MIL-C-83723) Multi-Pin Triax Connector Repair
133 00	M25516/XX–XX–XX (MIL–C–25516) Coax Connector Repair	152 00	M22TR10XP6N-H2 (MIL-C-26482) Coax Connector Repair
134 00	1211–XX and 1212–XX (MIL–C–25516) Coax Connector Repair	153 00	M83723–76A2232N (MIL–C–83723 Series 3) Connector Repair

Total number of pages in this manual is 1188 consisting of the following:

WP/Page Number	Change Number	WP/Page Number	Change Number	WP/Page Number	Change Number	WP/Page Number	Change Number
Title	5	13	0	24	0	54	0
$A \ldots \ldots \ldots$	5	14	0	25	0	55	0
$B\ \dots\dots\dots\dots$	5	15	0	26	0	56	0
$C \ldots \ldots \ldots$	5	16	0	27	0	57	0
$D\ldots\ldots\ldots$	5	17	3	28	0	58	0
E	5	18	3	29	0	59	0
F	5	001 02		30	0	60	3
$G \ldots \ldots \ldots$	5	1	3	31	0	61	3
TPDR-1	5	2	0	32	0	62	3
TPDR-2 blank	5	3	0	33	0	63	3
001 00		4	0	34	0	64	3
1	5	5	0	35	0	65	3
2	5	6	0	36	0	66	3
3	5	7	0	37	0	67	3
4	5	8	0	38	0	68	3
5	5	9	0	39	0	69	
6 blank	5	10	0	40	0	70	3
001 01		11	0	41	0	70A added	3
1	3	12	0	42	0	70B blank a	dded 3
2	0	13	0	43	0	71	0
3	0	14	0	44	0	72	
4	0	15	0	45	0	73	0
5	0	16	0	46	0	74	0
6	0	17	0	47	0		0
7	3	18	0	48	0	76	
8	3	19	0	49	0	77	
9	0	20	0	50	0	78	3
10	0	21	0	51	0	78A added	
11	0	22	0	52	0	78B blank a	dded 3
12	0	23	0	53	0		0

Change 5 Page C

WP/Page Number	Change Number	WP/Page Number	Change Number	WP/Page Number	Change Number	WP/Page Number	Change Number
80	0	2	0	12	0	5	(
	0		0	011 00 deleted .	0		
82	0	4	0	012 00			
83	3	5	0		0	8 blank	
84	3	6	0	2	0	021 00 reserved	
84A added	3	7	0	3	0	022 00	
84B blank adde	ed 3	8	0	4 blank	0		
85	0	9	0	013 00			
86	0	10	0		0	3	
87	0	11	0	2	0	4	
88	0	12 blank	0	3	0	5	
89	0	003 00		4	0	6 blank	
90	3	1	5	5	0	023 00 reserved	
91	3	2	5	6	0	024 00	
92 blank	3	3	5	7	0	1	
001 03 deleted	0	4	5	8	0	2	
002 00		5	5	9	0	025 00 reserved	
1	0	6	5	10	0	026 00	
2	0	7 added	5	11	0	1	
3	0	8 blank adde	d 5	12	0	2	(
4 blank	0	004 00		13	0	3	
002 01		1	5	14	0	4	
1	0	2	3	15	0	5	(
2	0	2A added	3	16	0	6	
3	0		led 3		0	7	
	0		5		0		(
	0		2	014 00		027 00 reserved	
	0		2		0	028 00	
	0		2		0		
	0		2		0		
	0		2		0		
	0		2		0		
	0		2		0		
	0		2		0		
	0		2		0		
	0		2		0		
002 02			2		0		
	0		2		0		
	0		2		0	029 00 reserved	
	0		2	015 00		030 00	
	0		2		1		
	0		2		1		
6			2		1	3	
002 03	0	004 01 deleted			1		
	0	004 01 deleted			1		
	0	005 00 reserved			1		
	0	006 00 reserved					
		007 00 reserved			1		
	0	008 00 reserved			1 		
	0	009 00 reserved	0				
	0	010 00	0		1	031 00	
	0		0				
	0		0	016 00 reserved			
	0		0	017 00 reserved			
	0		0	018 00 reserved			
	0		0	018 01 deleted			
	0		0	019 00 reserved	0		
	0		0	020 00		032 00	
	0		0		0		
	0		0		0		
002 04			0		0		
1	0	11	0	4	0	4	(

Change 5 Page D

WP/Page Number	Change Number	WP/Page Number	Change Number	WP/Page Number	Change Number	WP/Page Number	Change Number
	0	036 01			0		
	2		0		0		(
	0		0		0		(
	0		0		0		
	0		0		0		(
	0		0		0		(
	0		0		0	039 00 reserved	(
	0		0	036 02		040 00	
13	0	8	0		0		(
	0		0	2	0		
15	0	10	0	3	0		
16	0	11	0	4	0	4	
	0		0	5	0	5	
18	0	13	0	6	0	6	
19	0	14	0	7	0	041 00 reserved	
20	0	15	0		0	042 00	
21	0	16	0	9	0	1	(
22	0	17	0	10	0	2	(
23	0	18	0	11	0	3	
24 blank	0	19	0	12	0	4	(
033 00		20	0	13	0	043 00 reserved	(
1	0	21	0	14	0	044 00 reserved	
	0		0		0	045 00 reserved	
	0		0		0	046 00 reserved	
	0		0		0	047 00 reserved	
	0		0		0	048 00 reserved	
	0		0		0	049 00 reserved	
	0		0		0	050 00	
	0		0		0		(
	0		0		0		
	0		0		0	051 00 reserved	
	0		0	20	0	052 00 reserved	
	0		0		0	053 00 reserved	
	0		0		0	054 00 reserved	
	0		0		0	055 00 reserved	
	0		0		0	056 00 reserved	
	0		0		0	050 00 reserved	
	0		0	-,	0	058 00 reserved	
	0		0		0	058 00 reserved	
	0		0		0	060 00 1eserved	
							4
	0		0		0		(
			0		0		
22			0		0	3	
	0		0		0		(
	0		0		0		(
034 00 reversed .	0		0		0		(
035 00			0		0		
	0		0		0		(
	0		0		0		(
	0		0		0		(
	0		0		0		(
	0		0		0		(
	0		0		0		(
	0		0		0		(
8	0		0		0	15	
9	0	55	0		0	16	
	0	56	0	037 00 reserved	0	17	
11	0	57	0	038 00		18	(
12	0	58	0	1	0	19	(
036 00		59	0	2	0	20	(
		<i>c</i> 0	0	2	0	21	(
1	0	00	0	3		۷1	

Change 5 Page E

WP/Page Number	Change Number	WP/Page Number	Change Number	WP/Page Number	Change Number	WP/Page Number	Change Number
	0	080 00			4		
	0		0		4		(
	0		0		4		(
	0		0		4		(
	0		0		4		(
	0		0		4		
	0		0		4	8	
	0		0		4		
	0		0		4		
	0		0		4	101 00	
	0		0		4		
	0		0		4		
	0		0		4		
	0		0		4		(
061 00			0		4		(
	0		0		4		
	0		0		4	7	
	0		0		4		(
	0		0		4		(
5	0		0		4	10	(
6	0		0		4		
7	0	21	0	42 added	4	12	
8	0	22	0	43 added	4	13	
9	0	23	0	44 added	4	14	(
10	0	24	0	45 added	4	15	(
11	0	25	0	46 added	4	16	(
12	0	26	0	47 added	4	17	(
13	0	27	0	48 added	4	18	(
14	0	28	0	49 added	4	19	
15	0	29	0	50 added	4	20	
16	0	30	0	51 added	4	21	
17	0	081 00 reserved	0	52 added	4	22 blank	
18	0	082 00 reserved	0	091 00		102 00 reserved	(
19	0	083 00 reserved	0	1 added	4	103 00 reserved	
20	0	084 00 reserved	0	2 added	4	104 00	
21	0		0		4	1	(
	0		0		4		(
23	0	087 00 reserved	0	5 added	4	3	(
24	0		0		4	4	(
25	0	089 00 reserved	0	7 added	4	5	(
26	0	090 00		8 added	4	6	(
	0	1 added	4		4		
28 blank	0	2 added	4	10 added	4		(
062 00 reserved	0	3 added	4		4	9	(
	0		4		4		
	0		4		4		
	0		4		4		
	0		4		4	107 00	
	0		4		4		
	0		4		4		
	0		4		ed 4		
	5		4		0		
	5		4		0		
			4		0		
	0		4		0		
	0				0		
			4		0		
	0		4				
	0		4 		0		
	0						
	0		4	100 00	0		
0/9 00 reserved	0	zo added	4	1	0	15	(

Change 5 Page F

14	00000000	5	0 0 0 0 0 0 0 0 0 0	11 12 122 00 1 2 3	0 0 0	11	
16 blank	0000000	6	0 0 0 0	12	0	12	(
108 00 1	000000	7		122 00 1	0	128 00 reserved 129 00 reserved 130 00	
1	000000	8		1 2 3	0	129 00 reserved 130 00	
2	000000	9	0 0	3	0	130 00	
3	0 0 0 0	10	0	3			(
4	0 0 0	11 12 13	0		0	_	
5 6 7	0 0	12		4		1	(
6 7	0	13	0	4	0	2	(
7	0			5	0	3	(
			0	6	0	4	(
	0	14	0	7	0	5	
8		15	0	8	0	6	(
109 00 reserved	0	16	0	9	0	7	(
110 00 reserved	0	17	0	10	0	8	(
111 00		18	0	123 00			(
1	0		0	1	0		(
2			0		0		(
3		118 00			0		
4			0		0		
5			0		0		
6			0		0		
7			0		0		
8			0		0		
9			0	124 00			
10			0		3	131 00 reserved	
11			0		3	132 00 reserved	
12			0		3	133 00 leserved	
13			0		3		(
		10 blank 119 00	0				
14 blank	0		0		3		(
112 00	1		0		3		(
1			0		3		(
2			0		3		
3			0		3		
4			0		3		(
5			0		3		(
6			0		3		(
7			0		3		(
8			0		3		
9			0		3		(
10	0	120 00			3		(
11			0		3		(
12	0		0	18 added	3	134 00	
13	0	3	0	19 added	3	1	(
14			0	20 added	3		(
15	0	5	0		3	3	(
16	0	6	0	22 added	3	4	(
17	0	7	0	23 added	3	5	
18 blank	0	8	0	24 added	3	6	
113 00		9	0	25 added	3	7	
1	0	10	0	26 blank add	ed 3	8	
2	0	11	0	125 00 reserved	0	9	(
3	0	12	0	126 00 reserved	0	10	
4	0	121 00		127 00		135 00 reserved	
5	0	1	0	1	0	136 00 reserved	
6 blank	0	2	0	2	0	137 00	
114 00 reserved		3	0		0	1	
115 00 reserved			0		0		
116 00 reserved			0		0		
117 00			0		0		
1	0		0		0		
2			0		0		
3			0		0		

Change 5 Page G

WP/Page Number	Change Number	WP/Page Number	Change Number	WP/Page Number	Change Number	WP/Page Number	Change Number
8	0	2	0	20	0	3	(
9	0	3	0	21	0	4	(
10	0	4	0	22	0	5	(
138 00 reserved	0	5	0	23	0	6	(
139 00 reserved	0	6	0	24	0	7	(
140 00		7	0	25	0	8	(
1	0	8	0	26	0	9	(
2	0	9	0	27	0	10	(
3	0	10	0	28	0	11	(
	0	11	0	29	0	12	(
5	0	12	0	30	0	13	(
6		13	0	31	0	14	(
7			0	32	0		(
8		15	0	33	0	16	(
9	0	16	0	34	0	17	(
10			0		0		(
11			0		0		(
12			0		0		(
13			0		0		(
14			0	20	0	22	
	0		0		0	23	
16		145 00 reserved			5		(
	0	146 00 reserved			0	153 00	
18		147 00 reserved		151 00		1	(
19		148 00 reserved			0		(
	0	149 00 reserved			0		(
	0	150 00	0		0	4	
	0		5		0	5	
141 00	0		0		0		(
1.1.00	0		0		0	7	
2			0		0	8	
	0		0		0	9	
	0		0		0	10	
5			0		0		(
6			0		0		(
			0	12	0	12	(
7 8		,	0		0		(
9			0		0		(
10			0		0		(
11			0	2,	0		(
	0		0		0		(
	0		0		0	19	
	0		0		0		(
142 00 reserved			0	152 00		154 00 reserved	
1/14 DD recentred	0	18	0	1	0	155 00 reserved	(
144 00		10	0		0	156 00 reserved	

Change 5 - 15 March 2003

(TPDR-2 blank)

LIST OF TECHNICAL PUBLICATION DEFICIENCY REPORTS INCORPORATED ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA

This WP supersedes TPDR WP, dated 15 April 2002.

1. The TPDRs listed below have been incorporated in this issue.

IDENTIFICATION NUMBER/ QA SEQUENCE NUMBER	LOCATION
32379-03-0110	WP 004 00, Page 3
96908-03-0001	WP 150 00, Page 41

ALPHABETICAL INDEX

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

This WP supersedes WP 001 00, dated 15 April 2002.

Title	WP Number
BACKSHELL REPAIR	
Fabrication of Shielded Harness Terminated With Electromagnetic Interference (EMI)	0.61.00
and Tape Wrapped Thermal Barrier Backshells	061 00
Backshells Protective Boot Installation for Environmental Type Connectors With	060 00
Metal Cable Clamps	080 00
Molded Plastic Cable Clamps Backshells Repair of Silicone Rubber Tape Boots	090 00 050 00
Tape Wrapped Thermal Barrier Protective Boot Installation for Environmental Type Connectors With Molded Plastic Cable Clamps	091 00
CONNECTOR REPAIR	
AN3116-2 AN Type Coax Connector Repair	104 00
AV628-2 (MIL-C-81582) Connector Repair	160 00
Protective Boot Installation Connector Repair	150 00 137 00
Data Cable Assembly Replaceable Front Ends	137 00
DPX2NE41723 (MIL-C-81659) Connector Repair	200 00
DS07-27S-025 and DPX2NE41723 (MIL-C-81703) Connector Repair	177 00
DS07-27-XXXXXXX (MIL-C-81703) Connector Repair	178 00
D38999 (MIL-C-38999 Series 3) Connector Repair	168 00
E-794 and 2115-1-5 (MIL-C-39012) BNC Type Coax Connector Repair	111 00
GA121-1 Connector Repair	193 00
KJL6J9, KJL6T9, MS27467 and 88-4887XX (MIL-C-38999 Series 1) Connector Repair	169 00
KJL6T9, KJL6J9, MS27467 and 88-4887XX (MIL-C-38999 Series 1) Connector Repair	169 00
KJL7YC103451-3 and MS27468 (MIL-C-38999 Series 1) Connector Repair	170 00
KP-8610-120-602 (MIL-C-39012) Coax Connector Repair	100 00
LJT01RTXX-XXX014 and MS27656 (MIL-C-38999 Series 1) Connector Repair	172 00
L22TF96PN1 and L22TF96S8N1 (MIL-C-83723) Multi-Pin Triax Connector Repair	151 00
L22TF96S8N1 and L22TF96PN1 (MIL-C-83723) Multi-Pin Triax Connector Repair	151 00
MIL-C-24308 M24308 Connector Repair MIL-C-25516 M25516/XX-XX-XX Coax Connector Repair	205 00 133 00

Change 5

Page 2

001 00

Title	WP Number
CONNECTOR REPAIR (Cont.)	
MIL-C-25516 1211-XX and 1212-XX Coax Connector Repair	134 00
MIL-C-26482 M22TR10XP6N-H2 Coax Connector Repair	152 00
MIL-C-26482 Series 1 MS3116 Connector Repair	194 00
MIL-C-26482 MS3470, MS3472, MS3475, and MS3476 Rear Release Type Connector	
Repair	161 00
MIL-C-26482 88-556119-70S Connector Repair	162 00
MIL-C-26500 MS24266 Connector Repair	182 00
MIL-C-3643 19900 N Type Coax Connector Repair	108 00
MIL-C-38999 Series 1 KJL6J9, KJL6T9, MS27467 and 88-4887XX Connector Repair	169 00
MIL-C-38999 Series 1 LJT01RTXX-XXX014 and MS27656 Connector Repair	172 00
MIL-C-38999 Series 1 KJL7YC103451-3 and MS27468 Connector Repair	170 00
MIL-C-38999 Series 1 10-550598-35P Connector Repair	195 00
MIL-C-38999 Series 2 MS27473 Connector Repair	171 00
MIL-C-38999 Series 3 D38999 Connector Repair	168 00
MIL-C-39012 E-794 and 2115-1-5 BNC Type Coax Connector Repair	111 00
MIL-C-39012 KP-8610-120-602 Coax Connector Repair	100 00
MIL-C-39012 M39012-XX-XXXX BNC Type Coax Connector Repair	112 00
MIL-C-39012 M39012/XX-XXX and 1119-079-A721 N Type Coax Connector Repair	107 00
MIL-C-39012 M39012-XX-XXXX and 31-4372-X TNC Type Coax Connector Repair	117 00
MIL-C-39012 M39012/XX-XXXX SC Type Coax Connector Repair	127 00
MIL-C-39012 M39012/XX-XXXX SMA Type Coax Connector Repair	130 00
MIL-C-39012 SF4592-6005 TNC Type Coax Connector Repair	122 00
MIL-C-39012 101-T4100A-75 TNC Type Coax Connector Repair	118 00
MIL-C-39012 31-3228-(), 31-3229-(), 31-4229-(), 82-3223-(), 82-5627-()and 82-5676-1	116 00
	101 00
Coax Connector Repair	101 00
	140.00
Twinax Connector Repair	140 00
MIL-C-39012 31-33819-13 and 5841-XXXX Twinax Connector Repair	141 00
MIL-C-39012 31-4371-3001 and 31-4371-3009 TNC Type Coax Connector Repair	119 00
MIL-C-39012 31-8473-5 TNC Type Coax Connector Repair	123 00
MIL-C-39012 31-34181-2 Triax Connector Repair	120 00
MIL-C-39012 39100-10 BNC Type Coax Connector Repair	113 00
MIL-C-39012 4545-6010 TNC Type Coax Connector Repair	121 00
MIL-C-39012 4806-XXXX, 4811-XXXX, 4816-XXXX, 4841-XXXX and 4846-XXXX	
BNC Type Triax Connector Repair	144 00
MIL-C-49142 82-5770, 82-5772 and 82-5773 TNC Type Triax Connector Repair	124 00
MIL-C-5015 MS3450, MS3456 and MS3459 Connector Repair	157 00
MIL-C-81511 Series 4 M81511 Connector Repair	165 00
MIL-C-81582 AV628-2 Connector Repair	160 00
MIL-C-81659 DPX2NE41723 Connector Repair	200 00
MIL-C-81659 1-207595-X, 1-207596-X, 207595-X, 207596-X Connector Repair	201 00
MIL-C-81703 DD07-27S-025 and DS07-27S-025 Connector Repair	177 00
MIL-C-81703 DS07-27-XXXXXXX Connector Repair	178 00
MIL-C-81703 MS3147 Connector Repair	179 00
MIL-C-81703 17371-0108 Connector Repair	180 00
MIL-C-83723 L22TF96PN1 and L22TF96S8N1 Multi-Pin Triax Connector Repair	151 00

Change 5

Page 3

001 00

Title	WP Number
CONNECTOR REPAIR (Cont.)	
MIL-C-83723 Series 3 BJ8-12EXX-XXX with Tape Wrapped Thermal Barrier	
Protective Boot Installation Connector Repair	150 00
MIL-C-83723 Series 3 M83723-76A2232N Connector Repair	153 00
MS24266 (MIL-C-26500) Connector Repair	182 00
MS27467, KJL6J9, KJL6T9 and 88-4887XX (MIL-C-38999 Series 1) Connector Repair	169 00
MS27468 and KJL7YC103451-3 (MIL-C-38999 Series 1) Connector Repair	170 00
MS27473 (MIL-C-38999 Series 2) Connector Repair	171 00
MS27656 and LJT01RTXX-XXX014 (MIL-C-38999 Series 1) Connector Repair	172 00
MS3116 (MIL-C-26482 Series 1) Connector Repair	194 00
MS3147 (MIL-C-81703) Connector Repair	179 00
MS3450, MS3456 and MS3459 (MIL-C-5015) Connector Repair	157 00
MS3456, MS3450 and MS3459 (MIL-C-5015) Connector Repair	157 00
MS3459, MS3450 and MS3456 (MIL-C-5015) Connector Repair	157 00
MS3470, MS3472, MS3475, and MS3476 (MIL-C-26482) Rear Release Type Connector	
Repair	161 00
MS3472, MS3470, MS3475, and MS3476 (MIL-C-26482) Rear Release Type Connector	
Repair	161 00
MS3475, MS3470, MS3472, and MS3476 (MIL-C-26482) Rear Release Type Connector	
Repair	161 00
MS3476, MS3470, MS3472, and MS3475 (MIL-C-26482) Rear Release Type Connector	
Repair	161 00
M22TR10XP6N-H2 (MIL-C-26482) Coax Connector Repair	152 00
M24308 (MIL-C-24308) Connector Repair	205 00
M25516/XX-XX-XX (MIL-C-25516) Coax Connector Repair	133 00
MIL-C-39012 M39012-XX-XXXX BNC Type Coax Connector Repair	112 00
MIL-C-39012 M39012/XX-XXXX SC Type Coax Connector Repair	127 00
M39012/XX-XXXX (MIL-C-39012) SMA Type Coax Connector Repair	130 00
M39012/XX-XXXX and 31-4372-X (MIL-C-39012) TNC Type Coax Connector Repair	117 00
M39012/XX-XXX and 1119-079-A721 (MIL-C-39012) N Type Coax Connector Repair	107 00
M81511 (MIL-C-81511 Series 4) Connector Repair	165 00
M83723-76A2232N (MIL-C-83723 Series 3) Connector Repair	153 00
Relay Socket Modules Repair	173 00
SF4592-6005 (MIL-C-39012) TNC Type Coax Connector Repair	122 00
TVS06RK-XX-XXXX and TVS07RK-XX-XXXX Connector Repair	190 00
TVS07RK-XX-XXXX and TVS06RK-XX-XXXX Connector Repair	190 00
ON089560-1 Connector Repair	184 00
1-207595, 1-207596, 207595, 207596 (MIL-C-81659) Connector Repair	201 00
1-207596, 1-207595, 207595, 207596 (MIL-C-81659) Connector Repair	201 00
10-550598-35P (MIL-C-38999 Series 1) Connector Repair	195 00
101-T4100A-75 (MIL-C-39012) TNC Type Coax Connector Repair	118 00
1119-079-A721 and M39012/XX-XXX (MIL-C-39012) N Type Coax Connector Repair	107 00
1211-XX and 1212-XX (MIL-C-25516) Coax Connector Repair	134 00
1212-XX and 1211-XX (MIL-C-25516) Coax Connector Repair	134 00
165-XX-XXXX (5M30-XX-XXXX) Connector Repair	196 00
17371-0108 (MIL-C-81703) Connector Repair	180 00
19900 (MIL-C-3643) N Type Coax Connector Repair	108 00

Change 5

Page 4

001 00

Title	WP
ritie	Number
CONNECTOR REPAIR (Cont.)	
207595, 1-207595, 1-207596, 207596 (MIL-C-81659) Connector Repair	201 00
207596, 1-207595, 1-207596, 207595 (MIL-C-81659) Connector Repair	201 00
2115-1-5 and E-794 (MIL-C-39012) BNC Type Coax Connector Repair	111 00
31-3228-(), 31-3229-(), 31-4229-(), 82-3223-(), 82-5627-() and 82-5676-1 (MIL-C-39012)	
Coax Connector Repair	101 00
31-3229-(), 31-3228-(), 31-4229-(), 82-3223-(), 82-5627-() and 82-5676-1 (MIL-C-39012)	
Coax Connector Repair	101 00
31-33449-XX, 31-34179-XX, 5801-XXXX, 5811-XXXX and 5813-XXXX (MIL-C-39012)	
Twinax Connector Repair	140 00
31-33819-13 and 5841-XXXX (MIL-C-39012) Twinax Connector Repair	141 00
31-34179-XX, 31-33449-XX, 5801-XXXX, 5811-XXXX and 5813-XXXX (MIL-C-39012)	
Twinax Connector Repair	140 00
31-34181-2 (MIL-C-39012) TRIAX Connector Repair	120 00
31-4229-(), 31-3228-(), 31-3229-(), 82-3223-(), 82-5627-() and 82-5676-1 (MIL-C-39012)	
Coax Connector Repair	101 00
31-4371-3001 and 31-4371-3009 (MIL-C-39012) TNC Type Coax Connector Repair	119 00
31-4371-3009 and 31-4371-3001 (MIL-C-39012) TNC Type Coax Connector Repair	119 00
31-4372-X and M39012-XX-XXXX (MIL-C-39012) TNC Type Coax Connector Repair	117 00
31-8473-5 (MIL-C-39012) TNC Type Coax Connector Repair	123 00
39100-10 (MIL-C-39012) BNC Type Coax Connector Repair	113 00
4545-6010 (MIL-C-39012) TNC Type Coax Connector Repair	121 00
4806-XXXX, 4811-XXXX, 4816-XXXX, 4841-XXXX and 4846-XXXX (MIL-C-39012)	
BNC Type Triax Connector Repair	144 00
4811-XXXX, 4806-XXXX, 4816-XXXX, 4841-XXXX and 4846-XXXX (MIL-C-39012)	
BNC Type Triax Connector Repair	144 00
4816-XXXX, 4806-XXXX, 4811-XXXX, 4841-XXXX and 4846-XXXX (MIL-C-39012)	
BNC Type Triax Connector Repair	144 00
4841-XXXX, 4806-XXXX, 4811-XXXX, 4816-XXXX, and 4846-XXXX (MIL-C-39012)	
BNC Type Triax Connector Repair	144 00
4846-XXXX, 4806-XXXX, 4811-XXXX, 4816-XXXX, and 4841-XXXX (MIL-C-39012)	
BNC Type Triax Connector Repair	144 00
5M30-XX-XXXX 165-XX-XXXX Connector Repair	196 00
5801-XXXX, 31-33449-XX, 31-34179-XX, 5811-XXXX and 5813-XXXX (MIL-C-39012)	
Twinax Connector Repair	140 00
5811-XXXX, 31-33449-XX, 31-34179-XX, 5801-XXXX and 5813-XXXX (MIL-C-39012)	
Twinax Connector Repair	140 00
5813-XXXX, 31-33449-XX, 31-34179-XX, 5801-XXXX and 5811-XXXX(MIL-C-39012)	
Twinax Connector Repair	140 00
5841-XXXX and 31-33819-13 (MIL-C-39012) Twinax Connector Repair	141 00
82-3223-(), 31-3228-(), 31-3229-(), 31-4229-(), 82-5627-() and 82-5676-1 (MIL-C-39012)	
Coax Connector Repair	101 00
82-5627-(), 31-3228-(), 31-3229-(), 31-4229-(), 82-3223-() and 82-5676-1 (MIL-C-39012)	101.00
Coax Connector Repair	101 00
82-5676-1, 31-3228-(), 31-3229-(), 31-4229-(), 82-3223-() and 82-5627-() (MIL-C-39012)	101.00
Coax Connector Repair	101 00
82-5770, 82-5772-X, 82-5773-X, 82-5967-X, and 82-5992 (MIL-C-49142)	124 00
88-4887XX, KJL6J9, KJL6T9 and MS27467 (MIL-C-38999 Series 1) Connector Repair	169 00

001 00

Change 5

Page 5/(6 blank)

Title	WP Number
CONNECTOR REPAIR (Cont.)	162.00
88-556119-70S (MIL-C-26482) Connector Repair	162 00 187 00
885-200-003 Connector Repair	187 00
INDEXES AND LIST	
Alphabetical Index	001 00
Cable/Wiring Assembly Data Index	001 01
List of Materials	003 00
Reference Designation to Work Package Index (Volume Work Package)	001 02
Wire Type List	004 00
INTRODUCTIONS	
Employed on af Defense of Decimation Index and Aircraft Section Decimation Sector	002.02
Explanation of Reference Designation Index and Aircraft Section Designation System	002 02 002 04
Introduction	002 04
Part Identification and Wiring Information	002 00
Wiring Repair Manual (WRM) Format	002 01
	**- **
REPAIR TOOLS AND EQUIPMENT	
Crimping Tools	013 00
Insertion and Removal Tools	014 00
Soldering Tools - Procedures	012 00
Stripping Tools	010 00
Use of the Time Domain Reflectometer (TDR)	015 00
WIRING REPAIR	
Installation of Ground Terminals, Ring Tongue Crimped Barrel	036 01
Installation of Miscellaneous Terminals, Ring Tongue Crimped Barrel	036 02
Installation of Terminals, Ring Tongue Crimped Barrel	036 02
Installation, Removal and Routing of Coaxial Cable and Braided Harness Assemblies	020 00
Fabrication of Shielded Wire Harness Terminated with Electromagnetic Interference	
(EMI) Backshells	033 00
Prewired Components	042 00
Repair of Multi-Conductor Shielded Cable	030 00
Repair of Shielded/Non-Shielded Braided Wiring Harness	032 00
Repair of Single Conductor Non-Shielded Wire	026 00
Repair of Single Conductor Shielded Cable	028 00
Sealing of Electrical Cable Assemblies	022 00
Sealing of Electrical Components	024 00
Shielded Cable Splice Termination	031 00
Shielded Terminal Ferrule (High Temperature)	040 00
Solder Sleeve Installation	038 00
Splice Combinations and End Caps	035 00

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA CABLE/WIRING ASSEMBLY DATA INDEX

CABLE/WIRING ASSEMBLY DATA INDEX

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74A750002	COCKPIT CABLE ASSEMBLY	-010	500 02
74A750102	COCKPIT CABLE ASSEMBLY	-010	501 02
74A750201	COCKPIT CABLE ASSEMBLY	-010	502 01
74A750202	COCKPIT CABLE ASSEMBLY	-010	502 02
74A750203	COCKPIT CABLE ASSEMBLY	-010	502 03
74A750206	COCKPIT CABLE ASSEMBLY	-010	502 06
74A750207	COCKPIT CABLE ASSEMBLY	-010	502 07
74A750208	COCKPIT CABLE ASSEMBLY	-010	502 08
74A750210	COCKPIT CABLE ASSEMBLY	-010	502 10
74A750211	COCKPIT CABLE ASSEMBLY	-010	502 11
74A750212	COCKPIT CABLE ASSEMBLY	-010	502 12
74A750213	COCKPIT CABLE ASSEMBLY	-010	502 13
74A750214	COCKPIT CABLE ASSEMBLY	-010	502 14
74A750216	COCKPIT CABLE ASSEMBLY	-010	502 16
74A750218	COCKPIT CABLE ASSEMBLY	-010	502 18
74A750224	COCKPIT CABLE ASSEMBLY	-010	502 24
74A750301	COCKPIT CABLE ASSEMBLY	-010	503 01
74A750302	COCKPIT CABLE ASSEMBLY	-010	503 02
74A750303	COCKPIT CABLE ASSEMBLY	-010	503 03
74A750305	COCKPIT CABLE ASSEMBLY	-010	503 05
74A750307	COCKPIT CABLE ASSEMBLY	-010	503 07
74A750308	COCKPIT CABLE ASSEMBLY	-010	503 08
74A750310	COCKPIT CABLE ASSEMBLY	-010	503 10

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74A750311	COCKPIT CABLE ASSEMBLY	-010	503 11
74A750314	COCKPIT CABLE ASSEMBLY	-010	503 14
74A750316	COCKPIT CABLE ASSEMBLY	-010	503 16
74A750318	COCKPIT CABLE ASSEMBLY	-010	503 18
74A750320	COCKPIT CABLE ASSEMBLY	-010	503 20
74A750321	COCKPIT CABLE ASSEMBLY	-010	503 21
74A750322	COCKPIT CABLE ASSEMBLY	-010	503 22
74A750323	COCKPIT CABLE ASSEMBLY	-010	503 23
74A752001	NOSE CABLE ASSEMBLY	-020	520 01
74A752002	NOSE CABLE ASSEMBLY	-020	520 02
74A752003	NOSE CABLE ASSEMBLY	-020	520 03
74A752004	NOSE CABLE ASSEMBLY	-020	520 04
74A752005	NOSE CABLE ASSEMBLY	-020	520 05
74A752006	NOSE CABLE ASSEMBLY	-020	520 06
74A752007	NOSE CABLE ASSEMBLY	-020	520 07
74A752008	NOSE CABLE ASSEMBLY	-020	520 08
74A752105	NOSE CABLE ASSEMBLY	-020	521 05
74A752203	NOSE CABLE ASSEMBLY	-020	522 03
74A752204	NOSE CABLE ASSEMBLY	-020	522 04
74A752205	NOSE CABLE ASSEMBLY	-020	522 05
74A752212	NOSE CABLE ASSEMBLY	-020	522 12
74A753002	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 02
74A753003	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 03
74A753004	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 04
74A753005	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 05
74A753006	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 06
74A753007	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 07
74A753008	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 08
74A753009	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 09
74A753012	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 12
74A753014	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 14
74A753015	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 15
74A753019	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 19
74A753020	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 20

A4 54040 WDM			
ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74A753021	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 21
74A753022	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 22
74A753024	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 24
74A753027	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 27
74A753028	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 28
74A753029	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 29
74A753031	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 31
74A753032	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 32
74A753033	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 33
74A753034	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 34
74A753035	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 35
74A753036	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 36
74A753037	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 37
74A753038	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 38
74A753039	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 39
74A753040	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 40
74A753042	FORWARD FUSELAGE CABLE ASSEMBLY	-020	530 42
74A753103	FORWARD FUSELAGE CABLE ASSEMBLY	-020	531 03
74A753114	FORWARD FUSELAGE CABLE ASSEMBLY	-020	531 14
74A753119	FORWARD FUSELAGE CABLE ASSEMBLY	-020	531 19
74A753120	FORWARD FUSELAGE CABLE ASSEMBLY	-020	531 20
74A753122	FORWARD FUSELAGE CABLE ASSEMBLY	-020	531 22
74A753127	FORWARD FUSELAGE CABLE ASSEMBLY	-020	531 27
74A753133	FORWARD FUSELAGE CABLE ASSEMBLY	-020	531 33

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74A753134	FORWARD FUSELAGE CABLE ASSEMBLY	-020	531 34
74A753137	FORWARD FUSELAGE CABLE ASSEMBLY	-020	531 37
74A753138	FORWARD FUSELAGE CABLE ASSEMBLY	-020	531 38
74A753201	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 01
74A753202	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 02
74A753203	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 03
74A753204	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 04
74A753205	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 05
74A753206	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 06
74A753207	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 07
74A753208	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 08
74A753209	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 09
74A753210	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 10
74A753211	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 11
74A753212	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 12
74A753213	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 13
74A753214	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 14
74A753216	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 16
74A753217	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 17
74A753218	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 18
74A753219	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 19
74A753220	FORWARD FUSELAGE CABLE ASSEMBLY	-020	532 20
74A753221	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 21
74A753223	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 23

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE
74A753224	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 24
74A753225	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 25
74A753226	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 26
74A753227	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 27
74A753228	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 28
74A753229	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 29
74A753230	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 30
74A753231	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 31
74A753232	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 32
74A753233	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 33
74A753234	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 34
74A753235	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 35
74A753236	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 36
74A753237	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 37
74A753238	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 38
74A753243	FORWARD FUSELAGE CABLE ASSEMBLY	-030	532 43
74A753301	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 01
74A753302	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 02
74A753303	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 03
74A753304	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 04
74A753306	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 06
74A753311	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 11
74A753312	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 12
74A753314	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 14

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74A753315	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 15
74A753316	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 16
74A753317	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 17
74A753318	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 18
74A753319	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 19
74A753320	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 20
74A753322	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 22
74A753324	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 24
74A753330	FORWARD FUSELAGE CABLE ASSEMBLY	-030	533 30
74A754001	LEFT WING CABLE ASSEMBLY	-040	540 01
74A754201	LEFT WING CABLE ASSEMBLY	-040	542 01
74A754202	LEFT WING CABLE ASSEMBLY	-040	542 02
74A754203	LEFT WING CABLE ASSEMBLY	-040	542 03
74A754204	LEFT WING CABLE ASSEMBLY	-040	542 04
74A754205	LEFT WING CABLE ASSEMBLY	-040	542 05
74A754206	LEFT WING CABLE ASSEMBLY	-040	542 06
74A754207	LEFT WING CABLE ASSEMBLY	-040	542 07
74A754208	LEFT WING CABLE ASSEMBLY	-040	542 08
74A754209	LEFT WING CABLE ASSEMBLY	-040	542 09
74A754210	LEFT WING CABLE ASSEMBLY	-040	542 10
74A754211	LEFT WING CABLE ASSEMBLY	-040	542 11
74A754212	LEFT WING CABLE ASSEMBLY	-040	542 12
74A754213	LEFT WING CABLE ASSEMBLY	-040	542 13
74A754214	LEFT WING CABLE ASSEMBLY	-040	542 14
74A754215	LEFT WING CABLE ASSEMBLY	-040	542 15
74A754216	LEFT WING CABLE ASSEMBLY	-040	542 16
74A755001	RIGHT WING CABLE ASSEMBLY	-040	550 01
74A755201	RIGHT WING CABLE ASSEMBLY	-040	552 01
74A755202	RIGHT WING CABLE ASSEMBLY	-040	552 02
74A755203	RIGHT WING CABLE ASSEMBLY	-040	552 03
74A755204	RIGHT WING CABLE ASSEMBLY	-040	552 04
74A755205	RIGHT WING CABLE ASSEMBLY	-040	552 05
74A755206	RIGHT WING CABLE ASSEMBLY	-040	552 06
74A755207	RIGHT WING CABLE ASSEMBLY	-040	552 07
74A755208	RIGHT WING CABLE ASSEMBLY	-040	552 08
74A755209	RIGHT WING CABLE ASSEMBLY	-040	552 09
74A755210	RIGHT WING CABLE ASSEMBLY	-040	552 10
74A755212	RIGHT WING CABLE ASSEMBLY	-040	552 12
74A755213	RIGHT WING CABLE ASSEMBLY	-040	552 13

Change 3 Page 7

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74A755214	RIGHT WING CABLE ASSEMBLY	-040	552 14
74A755215	RIGHT WING CABLE ASSEMBLY	-040	552 15
74A756201	CABLE ASSEMBLY, LEFT MAIN GEAR	-040	562 01
74A756202	CABLE ASSEMBLY, RIGHT MAIN GEAR	-040	562 02
74A756203	CABLE ASSEMBLY, CENTER FUSELAGE	-040	562 03
74A756204	CABLE ASSEMBLY, CENTER FUSELAGE	-040	562 04
74A756205	CABLE ASSEMBLY, ELECTRICAL PYLON	-040	562 05
74A756206	CABLE ASSEMBLY, ELECTRICAL PYLON	-040	562 06
74A756207	CABLE ASSEMBLY, ELECTRICAL PYLON	-040	562 07
74A756208	CABLE ASSEMBLY, ELECTRICAL PYLON	-040	562 08
74A756209	CABLE ASSEMBLY, ELECTRICAL PYLON	-040	562 09
74A756210	CABLE ASSEMBLY, ELECTRICAL EXTERNAL TANK	-040	562 10
74A756211	CABLE ASSEMBLY, ELECTRICAL EXTERNAL TANK	-040	562 11
74A756212	CABLE ASSEMBLY, ELECTRICAL EXTERNAL TANK	-040	562 12
74A756213	CABLE ASSEMBLY, ELECTRICAL PYLON	-040	562 13
74A756214	CABLE ASSEMBLY, PYLON	-040	562 14
74A756225	CABLE ASSEMBLY, WALLEYE, JUMPER	-040	562 25
74A756226	CABLE ASSEMBLY, VER-2, JUMPER	-040	562 26
74A756227	CABLE ASSEMBLY, LAU-117/A, JUMPER	-040	562 27
74A756228	CABLE ASSEMBLY, AERO-5C, JUMPER	-040	562 28
74A756229	CABLE ASSEMBLY, LAU-115/A, JUMPER	-040	562 29
74A756230	CABLE ASSEMBLY, EXTERNAL TANK, JUMPER	-040	562 30
74A756232	CABLE ASSEMBLY, VER-2, WING PYLON, JUMPER	-040	562 32
74A756233	CABLE ASSEMBLY, ALQ-126A, JUMPER	-040	562 33
74A756234	CABLE ASSEMBLY, MER-7, JUMPER	-040	562 34
74A756235	CABLE ASSEMBLY, ELEC LAU-115/A JUMPER	-040	562 35
74A756236	CABLE ASSEMBLY, ELEC- HARPOON JUMPER	-040	562 36

Change 3 Page 8

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74A756245	CABLE ASSEMBLY, SHIRKE JUMPER	-040	562 45
74A756247	CABLE ASSEMBLY, GENERIC WEAPON WING PYLON JUMPER	-040	562 47
74A760001	CENTER FUSELAGE CABLE ASSEMBLY	-050	600 01
74A760011	CENTER FUSELAGE CABLE ASSEMBLY	-050	600 11
74A760012	CENTER FUSELAGE CABLE ASSEMBLY	-050	600 12
74A760013	CENTER FUSELAGE CABLE ASSEMBLY	-050	600 13
74A760014	CENTER FUSELAGE CABLE ASSEMBLY	-050	600 14
74A760015	CENTER FUSELAGE CABLE ASSEMBLY	-050	600 15
74A760016	CENTER FUSELAGE CABLE ASSEMBLY	-050	600 16
74A760017	CENTER FUSELAGE CABLE ASSEMBLY	-050	600 17
74A760018	CENTER FUSELAGE CABLE ASSEMBLY	-050	600 18
74A760019	CENTER FUSELAGE CABLE ASSEMBLY	-050	600 19
74A760020	CENTER FUSELAGE CABLE ASSEMBLY	-050	600 20
74A760021	CENTER FUSELAGE CABLE ASSEMBLY	-050	600 21
74A760022	CENTER FUSELAGE CABLE ASSEMBLY	-050	600 22
74A760025	CENTER FUSELAGE CABLE ASSEMBLY	-050	600 25
74A760111	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 11
74A760112	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 12
74A760113	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 13
74A760116	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 16
74A760117	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 17
74A760118	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 18
74A760119	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 19
74A760120	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 20
74A760201	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 01

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74A760202	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 02
74A760203	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 03
74A760204	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 04
74A760205	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 05
74A760206	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 06
74A760207	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 07
74A760208	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 08
74A760209	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 09
74A760210	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 10
74A760211	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 11
74A760212	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 12
74A760213	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 13
74A760214	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 14
74A760217	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 17
74A760218	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 18
74A760219	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 19
74A760220	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 20
74A760221	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 21
74A760222	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 22
74A760223	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 23
74A760224	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 24
74A760225	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 25
74A760226	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 26
74A760230	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 30

ASSEMBLY	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUM-	WORK PACKAGE
IDENTIFICATION	G/(B2E/(GGE)), 1112E	BER)	NUMBER
74A760231	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 31
74A760232	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 32
74A760233	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 33
74A760234	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 34
74A760235	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 35
74A760236	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 36
74A760237	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 37
74A760238	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 38
74A760239	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 39
74A760240	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 40
74A760241	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 41
74A760242	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 42
74A760243	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 43
74A760246	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 46
74A760248	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 48
74A760249	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 49
74A760250	CENTER FUSELAGE CABLE ASSEMBLY	-060	602 50
74A760301	CENTER FUSELAGE CABLE ASSEMBLY	-060	603 01
74A760303	CENTER FUSELAGE CABLE ASSEMBLY	-060	603 03
74A760325	CENTER FUSELAGE CABLE ASSEMBLY	-060	603 25
74A760326	CENTER FUSELAGE CABLE ASSEMBLY	-060	603 26
74A760330	CENTER FUSELAGE CABLE ASSEMBLY	-060	603 30
74A761202	AFT FUSELAGE CABLE ASSEMBLY	-060	612 02
74A761204	AFT FUSELAGE CABLE ASSEMBLY	-060	612 04
74A761205	AFT FUSELAGE CABLE ASSEMBLY	-060	612 05
74A761206	AFT FUSELAGE CABLE ASSEMBLY	-060	612 06

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74A761209	AFT FUSELAGE CABLE ASSEMBLY	-060	612 09
74A761210	AFT FUSELAGE CABLE ASSEMBLY	-060	612 10
74A761211	AFT FUSELAGE CABLE ASSEMBLY	-060	612 11
74A761213	AFT FUSELAGE CABLE ASSEMBLY	-060	612 13
74A761214	AFT FUSELAGE CABLE ASSEMBLY	-060	612 14
74A761219	AFT FUSELAGE CABLE ASSEMBLY	-060	612 19
74A761220	AFT FUSELAGE CABLE ASSEMBLY	-060	612 20
74A761221	AFT FUSELAGE CABLE ASSEMBLY	-060	612 21
74A761222	AFT FUSELAGE CABLE ASSEMBLY	-060	612 22
74A770002	No. 2 CIRCUIT BREAKER PANEL ASSEMBLY (52A-D026)	-070	700 02
74A770004	No. 4 CIRCUIT BREAKER PANEL ASSEMBLY (52A-D026)	-070	700 04
74A770005	No. 7 CIRCUIT BREAKER/RELAY PANEL ASSEMBLY (52A-C057)	-070	700 05
74A770006	No. 2 RELAY PANEL ASSEMBLY (52A-F058)	-070	700 06
74A770007	No. 3 RELAY PANEL ASSEMBLY (52A-E059)	-070	700 07
74A770009	RDR LCS SERVICE PANEL ASSEMBLY (22A-A090)	-070	700 09
74A770010	No. 5 CIRCUIT BREAKER PANEL ASSEMBLY (52A-D092)	-070	700 10
74A770011	MASTER ARM CONTROL PANEL ASSEMBLY (52A-H075)	-070	700 11
74A770012	MAP GAIN CONTROL PANEL ASSEMBLY (52A-J076)	-070	700 12
74A770013	LH VERTICAL CONSOLE CONTROL PANEL (52A-H077)	-070	700 13
74A770014	ELECTRICAL POWER CONTROL PANEL ASSEMBLY (1A-J084)	-070	700 14
74A770015	GND PWR CONTROL PANEL ASSEMBLY (1A-H004)	-070	700 15
74A770016	ECS PANEL ASSEMBLY (52A-J078)	-070	700 16
74A770017	MUX BUS IMPEDENCE MATCHING NETWORK (83A-Y013)	-070	700 17
74A770018	INTERIOR LIGHTS CONTROL BOX PANEL ASSEMBLY (8A-J002)	-070	700 18
74A770019	EXTERIOR LIGHTS CONTROL PANEL ASSEMBLY (52A-H091)	-070	700 19
74A770020	SNSR POD CONTROL BOX PANEL ASSEMBLY (52A-J080)	-070	700 20
74A770021	APU CONTROL PANEL (52A-H079)	-070	700 21
74A770022	COMM CONT PANEL (76A-B023)	-070	700 22
74A770023	ANTENNA SELECT CONTROL PANEL ASSEMBLY (52A-H089)	-070	700 23
74A770024	CANOPY ACTUATOR SWITCH PANEL ASSEMBLY (20A-J003)	-070	700 24

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74A770025	MC/HYD ISOL CONTROL PANEL ASSEMBLY (52A-H081)	-070	700 25
74A770026	ELECTRICAL BORESIGHT COMPEN- SATION ASSEMBLY (85A-F007)	-070	700 26
74A770027	PILOT SERVICES CONTROL PANEL ASSEMBLY (52A-H083)	-070	700 27
74A770029	ECM CONTROL PANEL ASSEMBLY (52A-H087)	-070	700 29
74A770030	LIGHT SUPPORT AND MAD COMPEN- SATOR PANEL ASSEMBLY (52A-J155)	-070	700 30
74A770031	THROTTLE QUADRANT (52A-H088)	-070	700 31
74A770032	FAN TEST CONTROL PANEL ASSEMBLY (52A-J053)	-070	700 32
74A770033	FUEL SYSTEM CONTROL PANEL (5A-H027)	-070	700 33
74A770035	LOWER LH INSTRUMENT PANEL ASSEMBLY (52A-H098)	-070	700 35
74A770036	FUEL CHECK PANEL (5A-B019)	-070	700 36
74A770042	No. 8 CIRCUIT BREAKER/RELAY PANEL ASSEMBLY (52A-C159)	-070	700 42
74A770044	D.C. POWER ZENER (1CRD124)	-070	700 44
74A770046	CONTROL STICK GRIP ADAPTER ASSEMBLY (53A-Y312)	-070	700 46
74A770047	ARRESTING HOOK SWITCHING MECH- ANISM (19MPS507)	-070	700 47
74A770048	LATERAL STICK POSITION SENSOR ASSEMBLY (84A-J122)	-070	700 48
74A770050	No. 9 RELAY PANEL ASSEMBLY (52A-C161)	-070	700 50
74A770055	VIDEO RELAY PANEL ASSEMBLY (79A-L023)	-070	700 55
74A770057	BATTERY CHARGING PANEL ASSEMBLY (1A-A138)	-070	700 57
74A770058	AMAC CONTROL PANEL (61A-J532)	-070	700 58
74A770101	ARRESTING HOOK UP SWITCH (19SS006)	-070	701 01
74A770102	ARRESTING HOOK DOWN PROXIMIT SWITCH	-070	701 02
74A770103	INFLIGHT REFUELING FLOODLIGHT (5DSB008)	-070	701 03
74A770104	RIGHT WING TIP POSITION LIGHT (7DSV010)	-070	701 04
74A770105	LEFT WING TIP POSITION LIGHT (7DSU011)	-070	701 05
74A770106	LEFT FORWARD FUSELAGE FORMATION LIGHT (7DSA015)	-070	701 06

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74A770107	RIGHT FORWARD FUSELAGE FORMA- TION LIGHT (7DSB017)	-070	701 07
74A770108	WING TIP FORMATION LIGHT (7DSU019)	-070	701 08
74A770109	WING TIP FORMATION LIGHT (7DSV021)	-070	701 09
74A770111	NLG UPLOCK SWITCH (12S-G051)	-070	701 11
74A770112	NLG DOWNLOCK SWITCH (12S-G046)	-070	701 12
74A770113	LAUNCH BAR RETRACT PROXIMITY SWITCH (12S-G049)	-070	701 13
74A770114	NLG WEIGHT ON WHEELS (WOW) SWITCH (12S-G057)	-070	701 14
74A770115	MLG DOWNLOCK SWITCH (12S-P048)	-070	701 15
74A770116	MLG WEIGHT ON WHEELS (WOW) SWITCH (12S-P059)	-070	701 16
74A770117	MLG DOWNLOCK SWITCH (12S-R047)	-070	701 17
74A770118	MLG WEIGHT ON WHEELS (WOW) SWITCH (12S-R058)	-070	701 18
74A770119	CANOPY POSITION SWITCH (20S-L008)	-070	701 19
74A770120	CANOPY LOCKED SWITCH (20S-L007)	-070	701 20
74A770121	BOARDING LADDER STOWED SWITCH	-070	701 21
74A770122	INFLIGHT REFUELING PROBE RETRACT LIMIT SWITCH (5S-B010)	-070	701 22
74A770123	WING LOCK WARNING SWITCH (17S-U013)	-070	701 23
74A770124	WING LOCK WARNING SWITCH (17S-V014)	-070	701 24
74A770125	WINGFOLD INHIBIT SWITCH (17S-U015)	-070	701 25
74A770126	WINGFOLD INHIBIT SWITCH (17S-V016)	-070	701 26
74A770127	FWD LEFT CONSOLE FLOODLIGHT (8DSH031)	-070	701 27
74A770128	FWD RIGHT CONSOLE FLOODLIGHT (8DSJ054)	-070	701 28
74A770129	REFUEL SCAVEMGE LINE PRESSURE TRANSDUCER (5MTF140)	-070	701 29
74A770130	ENGINE INSTRUMENT FLOODLIGHT (8DSH158)	-070	701 30
74A770131	DRAG BRACE SUPPORT STRAIN GRACE PRIMARY (85M-F019)	-070	701 31
74A770132	LEFT WING ROOT STRAIN GAGE PRIMARY (85M-U020)	-070	701 32
74A770133	LEFT WING FOLD STRAIN GAGE (85M-U021)	-070	701 33

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74A770134	EMERGENCY INSTRUMENT FLOODLIGHT (8DSJ128)	-070	701 34
74A770135	GUN ELECTRICAL SIGNAL SAFETY SWITCH (61S-C163)	-070	701 35
74A770136	ARMAMENT OVERRIDE SWITCH (61S-G153)	-070	701 36
74A770137	CHART LIGHT (8DSH143)	-070	701 37
74A770138	CHART LIGHT (8DSH143)	-070	701 38
74A770139	LOCK/SHOOT LIGHT ASSEMBLY (8DSJ150)	-070	701 39
74A770140	LOCK/SHOOT LIGHT ASSEMBLY (8DSJ150)	-070	701 40
74A770141	AIRCRAFT GUIDED MISSILE LAUNCHER LAU-116/A, LEFT (661A-Y200A)	-070	701 41
74A770142	AIRCRAFT GUIDED MISSILE LAUNCHER LAU-116/A, RIGHT (61A-Y200B)	-070	701 42
74A770143	AIRCRAFT GUIDED MISSILE LAUNCHER LAU-116/A (61J-Y200A)	-070	701 43
74A770144	LAUNCHER LATCHING RELAY ASSEMBLY (61K-Y202)	-070	701 44
74A770147	AIRCRAFT GUIDED MISSILE LAUNCHER ASSEMBLY	-070	701 47
74A770150	LAU-116/A LAUNCHER CABLE ASSEMBLY (61SQY201A)	-070	701 50
74A770151	LAU-116/A LAUNCHER No. 1 CABLE ASSEMBLY	-070	701 51
74A770152	LEFT WING TIP FORMATION LIGHT (7DSU049)	-070	701 52
74A770153	RIGHT WING TIP FORMATION LIGHT (7DSV050)	-070	701 53
74A770155	PLANING LINK SWITCH (12S-P091)	-070	701 55
74A770156	PLANING LINK SWITCH (12S-R092)	-070	701 56
74A770157	LAU-115/A LAUNCHER ELECTRICAL WIRING ASSEMBLY (61K-W225)	-070	701 57
74A770158	STICK STOP SOLENOID (84L-C103)	-070	701 58
74A770159	FCS EMERGENCY RAM AIR SCOOP SOLENOID (22L-D096)	-070	701 59
74A770164	LAU-115/A LAUNCHER LOCKING DEVICE SOLENOID (61L-W241)	-070	701 64
74A770165	FUEL QUANTITY TEST PLUG ASSEMBLY (5P-G024)	-070	701 65
74A770166	RADIO FREQUENCY FILTER (7FLU053)	-070	701 66
74A770167	RADIO FREQUENCY FILTER (7FLV054)	-070	701 67

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74A770168	RADIO FREQUENCY FILTER (8FLH161)	-070	701 68
74A770169	ECM COOLING AIR CONTROL VALVE (22L-E098)	-070	701 69
74A770170	RIGHT FORWARD RADIO FREQUENCY TRANSMISSION SWITCH	-070	701 70
74A770171	LEFT FORWARD RADIO FREQUENCY	-070	701 71
74A770172	E/U BATTERY VOLTMETER FLOODLIGHT (8DSJ165)	-070	701 72
74A770173	No. 1 FUEL TANK (5A-E035)	-070	701 73
74A770174	No. 1 FUEL TANK TRANSFER CONTROL VALVE (5L-F160)	-070	701 74
74A770175	No. 1 FUEL TANK FUEL LOW LEVEL SHUTOFF VALVE (5L-E171)	-070	701 75
74A770176	No. 1 FUEL TANK PRESSURE OPERATED INTERCONNECT VALVE (5S-E172)	-070	701 76
74A770181	CABLE ASSEMBLY FOR LEFT LAU-116A LAUNCHER	-070	701 81
74A770182	CABLE ASSEMBLY FOR RIGHT LAU-116A LAUNCHER	-070	701 82
74A770183	WIRING ASSEMBLY FOR LAU-115/A LAUNCHER COCKPIT CONFIGURATION	-070	701 83
74A770185	WIRING ASSEMBLY FOR LAU-116A LAUNCHER LATCHING RELAY COCK– PIT CONFIGURATION	-070	701 85
74A770186	WIRING ASSEMBLY FOR LAU-116A LAUNCHER BREECH/MOT F CABLE ASSEMBLY	-070	701 86
74A770200	PREWIRED COMPONENTS PANEL ASSEMBLY	-070	702 00
74A770201	No. 4 RELAY PANEL ASSEMBLY (52A-N118)	-070	702 01
74A770202	STROBE LIGHT FAULT INDICATOR (7A-S048)	-070	702 02
74A770300	EXTERNAL FUEL TANK ELECTRICAL DISCONNECT	-070	703 00
74A770301	EXTERNAL FUEL TANK FLOAT VALVE	-070	703 01
74A770302	EXTERNAL FUEL TANK SHUTOFF VALVE	-070	703 02
74A770303	EXTERNAL FUEL TANK QUANTITY PROBE SEAL ASSEMBLY	-070	703 03

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74A770504	No. 4 CIRCUIT BREAKER PANEL	-070	705 04
	ASSEMBLY (52A-D026)		
74A770505	No. 7 CIRCUIT BREAKER/RELAY PANEL	-070	705 05
744770506	ASSEMBLY (52A-C057)	070	705.06
74A770506	No. 2 RELAY PANEL ASSEMBLY (52A-F058)	-070	705 06
74A770507	No. 3 RELAY PANEL ASSEMBLY	-070	705 07
7 11 17 7 05 0 7	(52A-E059)	0,0	705 07
74A770511	MASTER ARM CONTROL PANEL	-070	705 11
	ASSEMBLY (52A-H075)		
74A770523	ANT SEL CONTROL PANEL ASSEMBLY	-070	705 23
744770504	(52A-H089)	070	705.24
74A770524	CANOPY ACTUATOR SWITCH ASSEMBLY (20A-J003)	-070	705 24
74A770542	No. 8 CIRCUIT BREAKER/RELAY PANEL	-070	705 42
7 117 7 00 12	ASSEMBLY (52A-C159)	070	703 12
74A770543	EMERGENCY JETTISON PANEL	-070	705 43
	ASSEMBLY (61A-K237)		
74A770550	VOLUME CONTROL PANEL ASSEMBLY	-070	705 50
	(76A-K032)		
74A770551	REAR INT LT CONTROL BOX PANEL	-070	705 51
74A770552	ASSEMBLY (8A-L098 REAR PILOT SERVICE CONTROL PANEL	-070	705 52
74A770332	ASSEMBLY (52A-K304)	-070	103 32
74A770553	FAN TEST CONTROL AND UTILITY LIGHT	-070	705 53
	PANEL ASSEMBLY (52A-L309)		
74A770554	MASTER MODE SELECT PANEL	-070	705 54
	ASSEMBLY (61A-L217)		-0
74A770555	VIDEO RELAY PANEL ASSEMBLY	-070	705 55
74A770556	(79A-E023) CONTROL DISPLAY SELECT PANEL	-070	705 56
74A770330	(80A-K023)	-070	703 30
74A770620	CANOPY LOCKED SWITCH, ELECT	-070	706 20
	(20S-E007)		
74A770675	FWD LEFT CONSOLE FLOODLIGHT	-070	706 75
	(8DSK132)		
74A770678	FWD RIGHT CONSOLE FLOODLIGHT	-070	706 78
74A799110	(8DSL131) SPECIAL PURPOSE, ELECTRICAL CABLE	-070	991 10
74A799110	ASSEMBLY	-070	991 10
74R794331	RETROFIT CABLE ASSEMBLY	-070	943 31
74R794332	RETROFIT CABLE ASSEMBLY	-070	943 32
74R794333	RETROFIT CABLE ASSEMBLY	-070	943 33
74R794334	RETROFIT CABLE ASSEMBLY	-070	943 34
74R794335	RETROFIT CABLE ASSEMBLY	-070	943 35
74R794336	RETROFIT CABLE ASSEMBLY	-070	943 36
74R794338	RETROFIT CABLE ASSEMBLY	-070	943 38

Change 3 Page 17

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74R794339	RETROFIT CABLE ASSEMBLY	-070	943 39
74R794340	RETROFIT CABLE ASSEMBLY	-070	943 40
74R794348	RETROFIT CABLE ASSEMBLY	-070	943 48
74R794349	RETROFIT CABLE ASSEMBLY	-070	943 49
74R794357	RETROFIT CABLE ASSEMBLY	-070	943 57
74R794358	RETROFIT CABLE ASSEMBLY	-070	943 58
74R794363	RETROFIT CABLE ASSEMBLY	-070	943 63
74R796365	RETROFIT CABLE ASSEMBLY	-070	943 65
74R794368	RETROFIT CABLE ASSEMBLY	-070	943 68
74R794369	RETROFIT CABLE ASSEMBLY	-070	943 69
74R794436	RETROFIT CABLE ASSEMBLY	-070	944 36
74R794537	CABLE ASSEMBLY	-070	945 37
74R794538	RETROFIT CABLE ASSEMBLY	-070	945 38
74R794539	RETROFIT CABLE ASSEMBLY	-070	945 39
74R794540	RETROFIT CABLE ASSEMBLY	-070	945 40
74R794541	RETROFIT CABLE ASSEMBLY	-070	945 41
74R794542	RETROFIT CABLE ASSEMBLY	-070	945 42
74R794543	RETROFIT CABLE ASSEMBLY	-070	945 43
74R794545	RETROFIT CABLE ASSEMBLY	-070	945 45
74R794546	RETROFIT CABLE ASSEMBLY	-070	945 46
74R798604	RETROFIT CABLE ASSEMBLY	-070	986 04
74R798605	RETROFIT CABLE ASSEMBLY	-070	986 05
74R798606	RETROFIT CABLE ASSEMBLY	-070	986 06
74R798607	RETROFIT CABLE ASSEMBLY	-070	986 07
74R798608	RETROFIT CABLE ASSEMBLY	-070	946 08
74R798609	RETROFIT CABLE ASSEMBLY	-070	946 09
74R798610	RETROFIT CABLE ASSEMBLY	-070	946 10
74R798612	RETROFIT CABLE ASSEMBLY	-070	946 12
74R798622	RETROFIT CABLE ASSEMBLY	-070	986 22
74R798623	RETROFIT CABLE ASSEMBLY	-070	986 23
74R798624	RETROFIT CABLE ASSEMBLY	-070	986 24

Change 3 Page 18

ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER
74R798625	RETROFIT CABLE ASSEMBLY	-070	986 25
74R798626	RETROFIT CABLE ASSEMBLY	-070	986 26
74R799115	RETROFIT CABLE ASSEMBLY	-070	991 15
74R799120	RETROFIT CABLE ASSEMBLY	-070	991 20
74R799130	RETROFIT CABLE ASSEMBLY	-070	991 30

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA REFERENCE DESIGNATION TO WORK PACKAGE INDEX

Reference Material

None

Alphabetical Index

Subject	Page No.
Reference Designation to Work Package Index	2

Record of Applicable Technical Directives

None

REFERENCE DESIGNATION TO WORK PACKAGE INDEX

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND1-A001	-020	532 11	A	74A753211
GND1-A001	-030	532 26	A/B	74A753226
GND1-A001	-030	533 11	В	74A753311
GND1-A005	-070	701 06	A/B	74A770106
GND1-A006	-020	532 11	A	74A753211
GND1-A006	-030	533 11	В	74A753311
GND1-A008	-020	522 03	A/B	74A752203
GND1-A009	-020	532 11	A	74A753211
GND1-A009	-030	533 11	В	74A753311
GND1-B002	-070	701 07	A/B	74A770107
GND1-C002	-020	532 11	A	74A753211
GND1-C002	-030	533 11	В	74A753311
GND1-C003	-020	532 11	A	74A753211
GND1-C003	-030	533 11	В	74A753311
GND1-C004	-020	532 05	A/B	74A753205
GND1-C004	-020	532 11	A	74A753211
GND1-C004	-030	533 11	В	74A753311
GND1-C005	-030	532 26	A/B	74A753226
GND1-C006	-030	532 26	A/B	74A753226
GND1-E002	-020	532 19	A	74A753219
GND1-E002	-030	533 19	В	74A753319
GND1-E004	-020	532 16	A	74A753216
GND1-E004	-020	532 19	A	74A753219
GND1-E004 GND1-E004	-030	533 16	В	74A753219 74A753316
GND1-E004 GND1-E004	-030	533 10	В	74A753310 74A753319
GND1-E004 GND1-E005	-020	532 17	A A	74A753217
GND1-E005 GND1-E005	-030	533 17	В	74A753217 74A753317
GND1-E005 GND1-E006	-020	532 19	A	74A753219
GND1-E006 GND1-E006	-020	532 19	В	74A753219 74A753319
GND1-E000 GND1-E007	-020	532 19	A	74A753219 74A753219
GND1-E007 GND1-E007	-020	532 19	В	74A753219 74A753319
GND1-E007 GND1-E008	-020	532 17	A	74A753319 74A753217
GND1-E008 GND1-E008	-030	533 17	В	74A753317 74A753317
GND1-E008 GND1-E102	-030	533 17	В	74A753317 74A753319
GND1-E102 GND1-F002	-030	532 18	A	74A753218
GND1-F002 GND1-F002	-020	532 18	В	74A753218 74A753318
GND1-F002 GND1-F002	-030	533 22	В	74A753318 74A753322
GND1-F002 GND1-F003	-020	532 16	A A	74A753222 74A753216
GND1-F003 GND1-F003	-020	532 30		74A753210 74A753230
			A	
GND1-F003 GND1-F003	-030 -030	533 16 533 30	В	74A753316
	-030 -060	602 25	В	74A753330 74A760225
GND1-F004			A	74A760225
GND1-F005	-020 030	532 14	A	74A753214
GND1-F005	-030	533 14	В	74A753314
GND1-H005	-010 010	502 01 503 01	A	74A750201
GND1-H005	-010	503 01 502 03	В	74A750301
GND1-H006	-010		A	74A750203
GND1-H006 GND1-J004	-010 010	503 03 502 02	В	74A750303 74A750202
	-010 010		A	
GND1-J004	-010	503 02 503 05	В	74A750302
GND1-K101	-010	503 05	В	74A750305
GND1-K102	-010 070	503 05	В	74A750305
GND1-K102	-070	943 28	В	74R794328
GND1-L001	-010	502 01	A	74A750201
GND1-L101	-010	503 01	В	74A750301
GND1-M001	-060	602 26	A	74A760226
GND1-M001	-060	603 26	B	74A760326
GND1-M002	-040	542 11	A/B	74A754211

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND1-M003	-040	542 16	A/B	74A754216
GND1-N001	-040	552 13	A/B	74A755213
GND1-P001	-060	602 22	A/B	74A760222
GND1-P002	-050	602 05	A/B	74A760205
GND1-P003	-050	602 05	A/B	74A760205
GND1-S001	-060	602 26	A	74A760226
GND1-S001	-060	603 26	В	74A760326
GND1-S002	-070	702 00	A/B	74A770200
GND1-S003	-070	702 00	A/B	74A770200
GND1-T001	-070	702 00	A/B	74A770200
GND1-T002	-060	602 25	A	74A760225
GND1-T002	-060	603 25	В	74A760325
GND1-T003	-070	702 00	A/B	74A770200
GND1-U001	-040	542 01	A/B	74A754201
GND1-U002	-040	542 15	A/B	74A754215
GND1-U003	-070	701 08	A/B	74A770108
GND1-U003	-070	701 52	A/B	74A770152
GND1-U004	-040	542 04	A/B	74A754204
GND1-V001	-070	701 09	A/B	74A770109
GND1-V001	-070	701 53	A/B	74A770153
GND1-V001 GND1-V002	-040	552 15	A/B A/B	74A770133 74A755215
				74A753213 74A753211
GND1U001	-020	532 11	A	74A753211 74A753216
GND10B003	-020	532 16	A	
GND10B003	-030	533 16	В	74A753316
GND10C005	-020	532 11	A	74A753211
GND10C005	-030	533 11	В	74A753311
GND10C006	-020	532 11	Α	74A753211
GND10C006	-020	532 17	A	74A753217
GND10C006	-030	533 11	В	74A753311
GND10C006	-030	533 17	В	74A753317
GND10C007	-020	532 01	A	74A753201
GND10C007	-020	532 04	A	74A753204
GND10C007	-030	533 01	В	74A753301
GND10C007	-030	533 04	В	74A753304
GND10C007	-070	943 31	A/B	74R794331
GND10E001	-020	532 04	A	74A753204
GND10E001	-020	532 17	A	74A753217
GND10E001	-030	533 04	В	74A753304
GND10E001	-030	533 17	В	74A753317
GND10E005	-020	532 16	A	74A753216
GND10E005	-020	532 19	A	74A753219
GND10E005	-030	533 19	В	74A753319
GND10E006	-020	532 17	A	74A753217
GND10E006	-030	533 17	В	74A753317
GND10F001	-020	532 12	A	74A753212
GND10F001	-030	533 12	В	74A753312
GND10F004	-020	532 03	A	74A753203
GND10F004	-020	532 14	A	74A753214
GND10F004	-020	532 16	A	74A753214
GND10F005	-020	532 10	A	74A753210
GND10F005	-020	532 18	A	74A753201
GND10F005 GND10F005	-030	533 18	B	74A753218 74A753318
GND10F005 GND10F005	-030	533 18	В	
				74A753322
GND10F007	-020	532 02	A	74A753202
GND10F007	-030	533 02	В	74A753302
GND10F009	-020	532 16	A	74A753216
GND10F009	-030	533 16	В	74A753316
GND10H002	-010	502 01	A	74A750201

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND10H002	-010	502 07	A	74A750207
GND10H002	-010	503 01	В	74A750301
GND10H002	-010	503 07	В	74A750307
GND10H003	-010	502 01	A	74A750201
GND10H003	-010	502 07	A	74A750207
GND10H003	-010	503 01	В	74A750301
GND10H003	-010	503 07	В	74A750307
GND10H007	-010	502 03	A	74A750203
GND10H007	-010	503 03	В	74A750303
GND10H011	-010	502 01	A	74A750201
GND10H011	-010	503 01	В	74A750301
GND10H013	-010	502 01	A	74A750201
GND10H013	-010	502 03	A	74A750203
GND10H013	-010	503 01	В	74A750301
GND10H013 GND10H013	-010	503 03	В	74A750301 74A750303
GND10H014	-010	502 01	A	74A750201
GND10H014	-010	502 07	A	74A750207
GND10H014	-010	503 01	В	74A750301
GND10H014	-010	503 07	В	74A750307
GND10J002	-010	502 02	A	74A750202
GND10J002	-010	503 02	В	74A750302
GND10J003	-010	502 02	A	74A750202
GND10J003	-010	502 08	A	74A750208
GND10J003	-010	503 02	В	74A750302
GND10J003	-010	503 08	В	74A750308
GND10J008	-010	502 02	A	74A750202
GND10J008	-010	502 08	A	74A750208
GND10J008	-010	503 02	В	74A750302
GND10J008	-010	503 08	В	74A750308
GND10J009	-010	502 02	A	74A750202
GND10J009	-010	503 02	В	74A750302
GND10J010	-010	502 07	A	74A750207
GND10J010	-010	502 08	A	74A750208
GND10J010	-010	503 07	В	74A750307
GND10J010	-010	503 08	В	74A750308
GND10J010	-070	943 32	A	74R794332
GND10J010	-070	943 33	В	74R794333
GND10K105	-010	503 07	В	74A750307
GND10K105 GND10K106	-010	503 07	В	74A750307 74A750301
GND10K100 GND10K107			В	
	-010	503 01		74A750301
GND10L001	-010	502 02	A	74A750202
GND10L005	-010	503 02	В	74A750302
GND10L006	-010	503 02	В	74A750302
GND10L106	-010	503 02	В	74A750302
GND10L106	-010	503 08	В	74A750308
GND10M001	-050	602 01	A	74A760201
GND10M001	-060	603 01	В	74A760301
GND10M002	-060	602 26	A	74A760226
GND10M002	-060	603 26	В	74A760326
GND10M004	-050	602 05	A/B	74A760205
GND10M004	-060	602 26	A	74A760226
GND10M004	-060	603 26	В	74A760326
GND10M005	-050	602 05	A/B	74A760205
GND10M005	-060	602 26	A	74A760226
GND10M005	-060	603 26	В	74A760326
GND10N001	-050	602 02	A/B	74A760202
GND10N001 GND10N001	-060	602 25	A/B A	74A760225
J 101 100 1	000	002 23	1 **	, 111,00223

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND10N002	-060	602 25	A	74A760225
GND10N002	-060	603 25	В	74A760325
GND10N003	-060	602 25	A	74A760225
GND10N003	-060	603 25	В	74A760325
GND10P001	-050	602 02	A/B	74A760202
GND10P001	-050	602 04	A/B	74A760204
GND10P001	-050	602 05	A/B	74A760205
GND10P001	-050	602 07	A/B	74A760207
GND10P001	-060	602 35	A/B	74A760235
GND10P002	-060	602 20	A/B	74A760220
GND10P002	-060	602 32	A/B	74A760232
GND10P004	-060	602 20	A/B	74A760220
GND10P005	-060	602 36	A/B	74A760236
GND10P005	-060	602 37	A/B	74A760237
GND10P006	-050	602 05	A/B	74A760205
GND10P007	-060	602 32	A/B A/B	74A760232
GND10P007 GND10P008	-060	603 01	В	74A760301
GND10P009	-060	603 26	B	74A760326
GND10P011	-050	602 07	A/B	74A760207
GND10P012	-050	602 05	A/B	74A760205
GND10P013	-060	602 25	A	74A760225
GND10P013	-060	603 25	В	74A760325
GND10R001	-050	602 02	A/B	74A760202
GND10R001	-050	602 04	A/B	74A760204
GND10R002	-060	602 38	A/B	74A760238
GND10R002	-060	602 39	A/B	74A760239
GND10R003	-050	602 14	A/B	74A760214
GND10R004	-050	602 14	A/B	74A760214
GND10R005	-050	602 07	A/B	74A760207
GND10R006	-050	602 07	A/B	74A760207
GND10R008	-060	602 25	A	74A760225
GND10R008	-060	603 25	В	74A760325
GND10R010	-060	603 03	В	74A760303
GND10R011	-060	603 25	В	74A760325
GND10R012	-060	603 25	В	74A760325
GND10R013	-060	603 25	В	74A760325
GND10R015	-050	602 07	A/B	74A760207
GND10R015 GND10R016	-050	602 07	A/B A/B	74A760207
GND10K010 GND10S001	-070	701 02	A/B A/B	74A770102
GND10S002	-050	602 01	A	74A760201
GND10S002	-060	602 26	A	74A760226
GND10S002	-060	603 01	В	74A760301
GND10S002	-060	603 26	В	74A760326
GND10S002	-060	612 04	A/B	74A761204
GND10S002	-060	612 06	A/B	74A761206
GND10S003	-060	602 26	A	74A760226
GND10S003	-060	603 26	В	74A760326
GND10S004	-060	602 25	A	74A760225
GND10S004	-060	603 25	В	74A760325
GND10S011	-060	602 26	A	74A760226
GND10S011	-060	603 26	В	74A760326
GND10T001	-060	602 25	A	74A760225
GND10T001	-060	603 25	В	74A760325
GND10T002	-060	602 25	A	74A760225
GND10T002	-060	603 25	В	74A760325
GND10T003	-050	602 03	A	74A760203
GND10T003 GND10T003	-060	603 03	В	74A760303

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND10T003	-060	612 05	A/B	74A761205
GND10T003	-060	612 11	A/B	74A761211
GND10T004	-060	602 25	A	74A760225
GND10T004	-060	603 25	В	74A760325
GND10T005	-060	602 25	A	74A760225
GND10T005	-060	603 25	В	74A760325
GND10T007	-060	602 25	A	74A760225
GND10T007	-060	603 25	В	74A760325
GND10U001	-040	542 01	A/B	74A754201
GND10U001	-040	542 04	A/B	74A754204
GND10U002	-040	542 06	A/B	74A754206
GND10U003	-040	542 10	A/B	74A754210
GND10U004	-040	542 02	A/B	74A754202
GND10U006	-040	542 12	A/B	74A754212
GND10U007	-040	542 09	A/B	74A754209
GND10V001	-040	552 01	A/B	74A755201
GND10V001	-040	552 04	A/B	74A755204
GND10V002	-040	552 06	A/B	74A755206
GND10V003	-040	552 10	A/B	74A755210
GND10V004	-040	552 12	A/B	74A755212
GND11C001	-070	700 05	A/B A	74A770005
				74A770003 74A770505
GND11C001	-070	705 05	В	
GND11C002	-070	700 42	A	74A770042
GND11C002	-070	705 42	В	74A770542
GND11C003	-070	700 50	A/B	74A770050
GND11E001	-070	700 07	A	74A770007
GND11E001	-070	705 07	В	74A770507
GND11E002	-070	705 55	В	74A770555
GND11F001	-070	700 06	A	74A770006
GND11F001	-070	705 06	В	74A770506
GND11H001	-070	700 29	A/B	74A770029
GND11H002	-070	700 33	A/B	74A770033
GND11L001	-070	700 55	A	74A770055
GND11N001	-070	702 01	A/B	74A770201
GND11W001	-070	701 47	A/B	68A770147
GND11W001	-070	701 83	A/B	68A770183
GND12-C002	-070	705 42	В	74A770542
GND12A001	-070	700 09	A/B	74A770009
GND12A003	-070	700 57	A/B	74A770057
GND12B001	-070	700 36	A/B	74A770036
GND12B002	-070	700 22	A/B	74A770022
GND12C001	-070	700 42	A	74A770042
GND12C001	-070	705 42	В	74A770542
GND12C002	-070	700 42	A	74A770042
GND12C002	-070	705 42	В	74A770542
GND12C002 GND12C003	-070	700 05	A	74A770005
GND12C003	-070	705 05	В	74A770505
GND12C004	-070 070	700 05 705 05	A	74A770005
GND12C004	-070	705 05	В	74A770505
GND12C005	-070	700 05	A	74A770005
GND12C005	-070	705 05	В	74A770505
GND12C006	-070	700 05	A	74A770005
GND12C006	-070	705 05	В	74A770505
GND12C007	-070	700 05	A	74A770005
GND12C007	-070	705 05	В	74A770505
GND12C008	-070	705 05	В	74A770505
GND12C009	-070	700 50	A/B	74A770050
GND12D001	-070	700 02	A/B	74A770002

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND12D002	-070	700 10	A/B	74A770010
GND12E001	-070	700 07	A	74A770007
GND12E001	-070	705 07	В	74A770507
GND12E002	-070	705 55	В	74A770555
GND12F002	-070	700 06	A	74A770006
GND12F002	-070	705 06	В	74A770506
GND12F003	-070	700 06	A	74A770006
GND12F003	-070	705 06	В	74A770506
GND12F004	-070	700 06	A	74A770006
GND12F004	-070	705 06	В	74A770506
GND12F005	-070	700 06	A	74A770006
GND12F005	-070	705 06	В	74A770506
GND12F006	-070	700 06	A	74A770006
GND12F006	-070	705 06	В	74A770506
GND12F007	-070	700 06	A	74A770006
GND12F007	-070	705 06	В	74A770506
GND12F007 GND12F009	-070	700 26	A/B	74A770026
GND12F009 GND12F010	-070	700 26		74A770026 74A770006
GND12F010 GND12F010	-070	700 06 705 06	A B	74A770006 74A770506
GND12F010 GND12H001				
	-070	700 15	A/B	74A770015
GND12H003	-070	700 11	A	74A770011
GND12H003	-070	705 11	В	74A770511
GND12J001	-070	700 20	A/B	74A770020
GND12J002	-070	700 30	A/B	74A770030
GND12J003	-070	700 32	A/B	74A770032
GND12J004	-070	700 48	A/B	74A770048
GND12J005	-070	700 48	A/B	74A770048
GND12K001	-070	705 50	В	74A770550
GND12K002	-070	705 43	В	74A770543
GND12K003	-070	705 56	В	74A770556
GND12L002	-070	705 53	В	74A770553
GND12L003	-070	700 55	A	74A770055
GND12N001	-070	702 01	A/B	74A770201
GND12N002	-070	702 01	A/B	74A770201
GND12N003	-070	702 01	A/B	74A770201
GND12N004	-070	702 01	A/B	74A770201
GND12W001	-070	701 47	A/B	68A770147
GND12W001	-070	701 57	A/B	74A770157
GND12W001	-070	701 83	A/B	68A770183
GND12Y002	-070	700 17	A/B	74A770017
GND12Y003	-070	700 46	A/B	74A770046
GND12Y005	-040	562 13	A/B	74A756213
GND12Y005	-070	701 50	A/B/A/B	74A770150
GND12Y006	-070	701 44	A/B/A/B	74A770144
GND12Y006	-070	701 44	A/B/A/B	74A770144 74A770185
GND2-A005	-020	532 11	A	74A753211
GND2-A005	-020	532 16	A	74A753216
GND2-A005	-030	533 11	В	74A753311
GND2-A005	-030	533 16	B	74A753316
GND2-A005	-070	943 35	A/B	74R794335
GND2-A009	-020	532 11	A	74A753211
GND2-A009	-030	533 11	В	74A753311
GND2-A010	-020	532 11	A	74A753211
GND2-A010	-030	532 38	A/B	74A753238
GND2-A010	-030	533 11	В	74A753311
GND2-A010	-070	943 38	A/B	74R794338
GND2-A011	-020	532 11	A	74A753211
GND2-A011	-030	533 11	В	74A753311

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND2-B001	-020	532 16	A	74A753216
GND2-B001	-030	533 16	В	74A753316
GND2-B005	-020	522 03	A/B	74A752203
GND2-B006	-020	532 16	A	74A753216
GND2-B006	-030	533 16	В	74A753316
GND2-B007	-020	532 16	A	74A753216
GND2-B007	-030	533 16	В	74A753316
GND2-C002	-020	532 11	A	74A753211
GND2-C002	-030	533 11	В	74A753311
GND2-C003	-020	532 17	A	74A753217
GND2-C003	-030	533 17	В	74A753317
GND2-C005	-020	532 11	A	74A753211
GND2-C005	-030	533 11	В	74A753311
GND2-C005	-070	701 36	A/B	74A770136
GND2-C005	-070	943 39	A/B	74R794339
GND2-C006	-020	532 05	A/B	74A753205
GND2-C006	-020	532 09	A/B	74A753209
GND2-C007	-020	532 11	A	74A753211
GND2-C007	-030	533 11	В	74A753311
GND2-C008	-020	532 09	A/B	74A753209
GND2-C009	-020	532 17	A	74A753217
GND2-C009 GND2-C009	-030	533 17	В	74A753217 74A753317
GND2-C009 GND2-C010	-020	532 11	A	74A753317 74A753211
GND2-C010 GND2-C010	-030	533 11	B	74A753211 74A753311
GND2-C010 GND2-C010	-070	943 36	A/B	74R794336
GND2-D003	-020	532 12	A	74A753212
GND2-D003	-020	532 16	A	74A753216
GND2-D003	-020	532 18	A	74A753218
GND2-D003	-030	533 12	В	74A753312
GND2-D003	-030	533 16	В	74A753316
GND2-D003	-030	533 18	В	74A753318
GND2-D003	-070	943 40	A/B	74R794340
GND2-D005	-020	532 08	A/B	74A753208
GND2-D006	-020	532 10	A/B	74A753210
GND2-D006	-020	532 12	A	74A753212
GND2-D006	-030	533 12	В	74A753312
GND2-D008	-020	532 12	A	74A753212
GND2-D008	-020	532 18	A	74A753218
GND2-D008	-030	533 12	В	74A753312
GND2-D008	-030	533 18	В	74A753318
GND2-D009	-020	532 12	A	74A753212
GND2-D009	-030	533 12	В	74A753312
GND2-E002	-020	532 17	A	74A753217
GND2-E002	-030	533 17	В	74A753317
GND2-E003	-020	532 19	A	74A753219
GND2-E003	-030	533 19	В	74A753319
GND2-E004	-020	532 17	A	74A753217
GND2-E004	-030	533 17	В	74A753317
GND2-E004	-070	943 27	В	74R794327
GND2-E004	-070	943 30	В	74R794330
GND2-E005	-020	532 17	A	74A753217
GND2-E005	-030	533 17	В	74A753317
GND2-E006	-020	532 19	A	74A753219
GND2-E006	-030	533 19	В	74A753319
GND2-E007	-030	533 17	В	74A753317
GND2-E007 GND2-F007	-020	532 18	A	74A753317 74A753218
GND2-F007 GND2-F007	-030	533 18	В	74A753218 74A753318
GND2-F008	-020	532 02	A	74A753202

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND2-F008	-030	533 02	В	74A753302
GND2-F009	-020	532 16	A	74A753216
GND2-F009	-020	532 17	A	74A753217
GND2-F009	-030	533 17	В	74A753317
GND2-F010	-020	532 16	A	74A753216
GND2-F010	-030	533 16	В	74A753316
GND2-F013	-020	532 14	A	74A753214
GND2-F013	-030	533 14	В	74A753314
GND2-F015	-020	532 16	A	74A753216
GND2-F015	-030	533 16	В	74A753316
GND2-F016	-020	532 01	A	74A753201
GND2-F016	-020	532 14	A	74A753214
GND2-F016	-020	532 16	A	74A753216
GND2-F016	-030	533 01	В	74A753301
GND2-F016 GND2-F016	-030	533 14	В	74A753301 74A753314
GND2-F016	-030	533 16	В	74A753316
GND2-F017	-020	532 12	A	74A753212
GND2-F017	-020	532 18	A	74A753218
GND2-F017	-030	533 12	В	74A753312
GND2-F017	-030	533 18	В	74A753318
GND2-F018	-020	532 04	A	74A753204
GND2-F018	-030	533 04	В	74A753304
GND2-F020	-020	532 14	A	74A753214
GND2-F020	-030	533 14	В	74A753314
GND2-F021	-060	602 25	A	74A760225
GND2-F022	-020	532 03	A	74A753203
GND2-F022	-030	533 03	В	74A753303
GND2-H001	-010	502 01	A	74A750201
GND2-H001	-010	503 01	В	74A750301
GND2-H002	-010	502 01	A	74A750201
GND2-H002	-010	502 07	A	74A750207
GND2-H002	-010	503 01	В	74A750301
GND2-H002	-010	503 07	В	74A750307
GND2-H004	-010	502 01	A	74A750201
GND2-H004	-010	503 01	В	74A750301
GND2-H006	-010	502 01	A	74A750201
GND2-H006	-010	503 01	В	74A750301
GND2-H000 GND2-H011	-010	502 01	A	74A750201
GND2-H011 GND2-H011		503 01		74A750301
	-010	502 01	В	
GND2-H015	-010		A	74A750201
GND2-H015	-010	503 01	В	74A750301
GND2-J003	-010	502 02	A	74A750202
GND2-J003	-010	503 02	В	74A750302
GND2-J004	-010	502 02	A	74A750202
GND2-J004	-010	503 02	В	74A750302
GND2-J006	-010	502 02	A	74A750202
GND2-J006	-010	503 02	В	74A750302
GND2-J008	-010	502 02	A	74A750202
GND2-J008	-010	503 02	В	74A750302
GND2-J009	-010	502 10	A	74A750210
GND2-J009	-010	503 10	В	74A750310
GND2-J010	-010	502 01	A	74A750201
GND2-J010	-010	502 03	A	74A750203
GND2-J010	-010	503 01	В	74A750301
GND2-J010	-010	503 03	В	74A750303
GND2-K002	-010	502 01	A	74A750201
GND2-K002 GND2-K002	-010	503 01	В	74A750301
01122 11002	010	20201	1 -	1 12 1 3 0 3 0 1

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND2-K102	-010	503 01	В	74A750301
GND2-L004	-010	502 01	A	74A750201
GND2-L004	-010	502 02	A	74A750202
GND2-L005	-010	502 14	A	74A750214
GND2-L005	-010	503 02	В	74A750302
GND2-L006	-010	502 02	A	74A750202
GND2-L006	-070	943 18	A	74R794318
GND2-L101	-010	503 01	В	74A750301
GND2-L101	-010	503 02	В	74A750302
GND2-L102	-010	503 02	В	74A750302
GND2-L103	-010	503 02	В	74A750302
GND2-L104	-010	503 02	В	74A750302
GND2-L105	-010	503 02	В	74A750302
GND2-M001	-060	602 26	A	74A760226
GND2-M001	-060	603 26	В	74A760326
GND2-M002	-050	602 05	A/B	74A760205
GND2-M002 GND2-M002	-060	602 26	A	74A760226
GND2-M002 GND2-M002	-060	603 26	В	74A760326
GND2-M002 GND2-M003	-040	542 11	A/B	74A754211
GND2-M003 GND2-M004	-040 -040	542 13	A/B A/B	74A754211 74A754213
GND2-N004 GND2-N001	-060	602 25	A/B A	74A760225
GND2-N001 GND2-N001	-060	603 25	В	74A760325
		602 07	A/B	
GND2-N002 GND2-N003	-050 -050	602 07	A/B A/B	74A760207 74A760207
GND2-N003	-060	602 25	A	74A760225
GND2-N003	-060	603 25	B	74A760325
GND2-P001	-050	602 05	A/B	74A760205
GND2-P001	-050	602 07	A/B	74A760207
GND2-P001	-060	602 35	A/B	74A760235
GND2-P002	-050	602 05	A/B	74A760205
GND2-P003	-060	602 32	A/B	74A760232
GND2-P004	-060	602 26	A	74A760226
GND2-P004	-060	603 26	В	74A760326
GND2-P005	-060	602 26	A	74A760226
GND2-P005	-060	603 26	В	74A760326
GND2-P006	-050	602 05	A/B	74A760205
GND2-P007	-050	602 05	A/B	74A760205
GND2-P008	-050	602 07	A/B	74A760207
GND2-P009	-050	602 05	A/B	74A760205
GND2-P010	-050	602 05	A/B	74A760205
GND2-P011	-060	602 26	A	74A760226
GND2-P011	-060	603 26	В	74A760326
GND2-P012	-050	602 05	A/B	74A760205
GND2-P013	-050	602 05	A/B	74A760205
GND2-R001	-050	602 07	A/B	74A760207
GND2-R003	-060	602 34	A/B	74A760234
GND2-R004	-050	602 07	A/B	74A760207
GND2-R005	-050	602 07	A/B	74A760207
GND2-R006	-050	602 07	A/B	74A760207
GND2-R007	-050	602 07	A/B	74A760207
GND2-R008	-060	602 25	A	74A760225
GND2-R008	-060	603 25	В	74A760325
GND2-R010	-050	602 07	A/B	74A760207
GND2-R011	-050	602 07	A/B	74A760207
GND2-R012	-060	602 25	A	74A760225
GND2-R012	-060	603 25	В	74A760325
GND2-R013	-050	602 07	A/B	74A760207
GND2-R014	-050	602 07	A/B	74A760207

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND2-S001	-060	612 22	A/B	74A761222
GND2-S002	-060	602 25	A	74A760225
GND2-S002	-060	603 25	В	74A760325
GND2-S002	-070	701 01	A/B	74A770101
GND2-S003	-050	602 01	A	74A760201
GND2-S003	-060	603 01	В	74A760301
GND2-S003	-060	612 21	A/B	74A761221
GND2-S004	-060	602 26	A	74A760226
GND2-S004	-060	603 26	В	74A760326
GND2-S005	-060	602 26	A	74A760226
GND2-S005	-060	603 26	В	74A760326
GND2-S007	-060	602 25	A	74A760225
GND2-S007	-060	603 25	В	74A760325
GND2-S007 GND2-S008	-070	702 00	A/B	74A770200
GND2-3008 GND2-T001	-060	602 25	A/B A	74A760225
			B	
GND2-T001	-060	603 25		74A760325
GND2-T002	-060	612 20	A/B	74A761220
GND2-T003	-060	602 25	A	74A760225
GND2-T003	-060	603 25	В	74A760325
GND2-T003	-060	612 14	A/B	74A761214
GND2-T004	-060	602 25	A	74A760225
GND2-T004	-060	603 25	В	74A760325
GND2-T005	-070	702 00	A/B	74A770200
GND2-U002	-040	542 01	A/B	74A754201
GND2-U004	-040	542 04	A/B	74A754204
GND2-U006	-040	542 09	A/B	74A754209
GND2-U008	-040	542 03	A/B	74A754203
GND2-V002	-040	552 01	A/B	74A755201
GND2-V003	-040	542 04	A	74A754204
GND2-V003	-040	552 04	A/B	74A755204
GND2-V004	-040	552 09	A/B	74A755209
GND2-V006	-040	552 03	A/B	74A755203
GND3-A001	-020	532 11	A	74A753211
GND3-A001	-030	533 11	В	74A753311
GND3-A002	-020	522 03	A/B	74A752203
GND3-A004	-020	532 16	A	74A753216
GND3-A004	-030	533 16	В	74A753316
GND3-A004 GND3-A004	-070	943 35	A/B	74R794335
GND3-B004	-070	532 16		74A753216
GND3-B004 GND3-B004	-020		A B	
		533 16		74A753316
GND3-B005	-020	532 16	A	74A753216
GND3-B005	-030	533 16	В	74A753316
GND3-C002	-020	532 17	A	74A753217
GND3-C002	-030	533 17	В	74A753317
GND3-C004	-020	532 11	A	74A753211
GND3-C004	-030	533 11	В	74A753311
GND3-C006	-020	532 11	A	74A753211
GND3-C006	-020	532 19	A	74A753219
GND3-C006	-030	533 11	В	74A753311
GND3-C006	-030	533 19	В	74A753319
GND3-C007	-020	532 11	A	74A753211
GND3-C007	-030	533 11	В	74A753311
GND3-D003	-020	532 12	A	74A753212
GND3-D003	-020	532 16	A	74A753216
GND3-D003	-020	532 18	A	74A753218
GND3-D003	-030	533 12	В	74A753312
GND3-D003 GND3-D003	-030	533 16	В	74A753312 74A753316
01100 0000	030	222 10		1 11 11 3 3 3 1 0

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND3-E001	-020	532 19	A	74A753219
GND3-E001	-030	533 19	В	74A753319
GND3-E002	-020	532 17	A	74A753217
GND3-E002	-030	533 17	В	74A753317
GND3-E101	-030	533 19	В	74A753319
GND3-F002	-020	532 16	A	74A753216
GND3-F002	-030	533 16	В	74A753316
GND3-F003	-020	532 18	A	74A753218
GND3-F003	-030	533 18	В	74A753318
GND3-F004	-020	532 16	A	74A753216
GND3-F004	-030	533 16	В	74A753316
GND3-F005	-020	532 16	A	74A753216
GND3-F005	-030	533 16	В	74A753316
GND3-F006	-020	532 02	A	74A753202
GND3-F006	-030	533 02	В	74A753302
GND3-F010	-020	532 04	A	74A753204
GND3-F010	-030	533 04	В	74A753304
GND3-F011	-060	602 25	A	74A760225
GND3-F012	-020	532 01	A	74A753201
GND3-F012	-020	532 14	A	74A753214
GND3-F012	-020	532 16	A	74A753216
GND3-F012	-030	533 01	В	74A753301
GND3-F012	-030	533 14	В	74A753314
GND3-F012	-030	533 16	В	74A753316
GND3-F013	-020	532 03	A	74A753203
GND3-F013	-030	533 03	В	74A753303
GND3-H003	-010	502 01	A	74A750201
GND3-H003	-010	503 01	В	74A750301
GND3-H007	-010	502 01	A	74A750201
GND3-H007	-010	503 01	В	74A750301
GND3-H008	-010	502 01	A	74A750201
GND3-H008	-010	503 01	В	74A750301
GND3-H016	-010	502 01	A	74A750201
GND3-H016	-010	502 07	A	74A750207
GND3-H016	-010	503 01	В	74A750301
GND3-H016	-010	503 07	В	74A750307
GND3-J001	-010	502 02	A	74A750202
GND3-J001	-010	503 02	В	74A750302
GND3-J004	-010	502 02	A	74A750202
GND3-J004	-010	503 02	В	74A750302
GND3-K001	-010	502 02	A	74A750202
GND3-K101	-010	503 05	В	74A750305
GND3-K103	-010	503 01	В	74A750301
GND3-K104	-010	503 01	В	74A750301
GND3-K105	-010	503 05	В	74A750305
GND3-K105	-070	943 28	В	74R794328
GND3-L001	-010	502 02	A	74A750202
GND3-L001	-070	701 19	A	74A770119
GND3-L001	-070	701 20	A	74A770120
GND3-L103	-010	503 02	В	74A750302
GND3-L103	-070	701 20	A	74A770120
GND3-L104	-010	503 01	В	74A750301
GND3-M001	-070	701 21	A/B	74A770121
GND3-N001	-060	602 25	A	74A760225
GND3-N001	-060	603 25	В	74A760325
GND3-N002	-060	602 25	A	74A760225
GND3-N002	-060	603 25	B	74A760325
GND3-N003	-070	702 01	A/B	74A770201

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND3-P002	-050	602 05	A/B	74A760205
GND3-P003	-060	602 32	A/B	74A760232
GND3-P004	-050	602 05	A/B	74A760205
GND3-P004	-050	602 07	A/B	74A760207
GND3-P004	-060	602 35	A/B	74A760235
GND3-P005	-060	602 32	A/B	74A760232
GND3-P006	-050	602 05	A/B	74A760205
GND3-P007	-050	602 05	A/B	74A760205
GND3-P008	-060	602 26	A	74A760226
GND3-P008	-060	603 26	В	74A760326
GND3-R002	-050	602 07	A/B	74A760207
GND3-R002 GND3-R003	-050	602 07	A/B	74A760207
GND3-R004	-050	602 07	A/B	74A760207
	-050	602 07	A/B A/B	
GND3-R005				74A760207
GND3-R006	-050	602 07	A/B	74A760207
GND3-R007	-050	602 07	A/B	74A760207
GND3-R008	-060	602 34	A/B	74A760234
GND3-S001	-060	602 25	A	74A760225
GND3-S001	-060	603 25	В	74A760325
GND3-T001	-060	602 25	A	74A760225
GND3-T001	-060	603 25	В	74A760325
GND3-T002	-060	602 25	A	74A760225
GND3-T002	-060	603 25	В	74A760325
GND3-T003	-060	602 25	A	74A760225
GND3-T003	-060	603 25	В	74A760325
GND3-U001	-040	542 04	A/B	74A754204
GND3-U008	-040	542 01	A/B	74A754201
GND3-V001	-040	552 04	A/B	74A755204
GND3-V001 GND3-V002	-040	552 01	A/B A/B	74A755204 74A755201
GND4-A001	-020	532 16	A	74A753216
GND4-A001	-030	533 16	В	74A753316
GND4-B001	-020	532 16	A	74A753216
GND4-B001	-030	533 16	В	74A753316
GND4-B002	-020	532 16	A	74A753216
GND4-B002	-030	533 16	В	74A753316
GND4-B002	-070	943 57	A	74R794357
GND4-B003	-020	522 03	A/B	74A752203
GND4-C001	-020	532 11	A	74A753211
GND4-C001	-030	533 11	В	74A753311
GND4-D001	-020	532 10	A/B	74A753210
GND4-D001	-020	532 12	A	74A753212
GND4-D001	-030	533 12	В	74A753312
GND4-D004	-020	532 12	A	74A753212
GND4-D004	-030	533 12	В	74A753312
GND4-D006	-020	532 12	A	74A753212
GND4-D006	-030	533 12	В	74A753312
GND4-D007	-020	532 12	A	74A753212
GND4-D007	-030	533 12	В	74A753312
GND4-F006	-020	532 14	A	74A753312 74A753214
GND4-F006 GND4-F006	-020	532 14		74A753214 74A753219
			A	
GND4-F006	-030	533 14	В	74A753314
GND4-F006	-030	533 19	В	74A753319
GND4-F008	-020	532 16	A	74A753216
GND4-F008	-030	533 16	В	74A753316
GND4-F010	-020	532 16	A	74A753216
GND4-F010	-030	533 16	В	74A753316
GND4-F011	-020	532 16	A	74A753216
GND4-F011	-020	532 17	A	74A753217

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND4-F011	-030	533 16	В	74A753316
GND4-F011	-030	533 17	В	74A753317
GND4-F012	-020	532 16	A	74A753216
GND4-F012	-030	533 16	В	74A753316
GND4-H005	-010	502 01	A	74A750201
GND4-H005	-010	503 01	В	74A750301
GND4-H006	-010	502 01	A	74A750201
GND4-H006	-010	502 07	A	74A750207
GND4-H006	-010	503 01	В	74A750301
GND4-H006	-010	503 07	В	74A750307
GND4-H008	-010	502 01	A	74A750201
GND4-H008	-010	503 01	В	74A750301
GND4-H009	-010	502 01	A	74A750201
GND4-H009 GND4-H009		503 01	В	
	-010			74A750301
GND4-H010	-010	502 01	A	74A750201
GND4-H010	-010	502 02	A	74A750202
GND4-H010	-010	503 01	В	74A750301
GND4-H010	-010	503 02	В	74A750302
GND4-H011	-010	502 01	A	74A750201
GND4-H011	-010	503 01	В	74A750301
GND4-H018	-010	502 01	A	74A750201
GND4-H018	-010	502 03	A	74A750203
GND4-H018	-010	503 01	В	74A750301
GND4-H018	-010	503 03	В	74A750303
GND4-J006	-010	502 02	A	74A750202
GND4-J006	-010	502 10	A	74A750210
GND4-J006	-010	503 02	В	74A750302
GND4-J006	-010	503 10	В	74A750310
GND4-J000 GND4-J007	-010	502 02		74A750202
			A	
GND4-J007	-010	503 02	В	74A750302
GND4-J009	-010	502 02	A	74A750202
GND4-J009	-010	503 02	В	74A750302
GND4-J010	-010	502 02	A	74A750202
GND4-J010	-010	503 02	В	74A750302
GND4-J013	-010	502 02	A	74A750202
GND4-J013	-010	503 02	В	74A750302
GND4-J016	-010	502 02	A	74A750202
GND4-J016	-010	503 02	В	74A750302
GND4-J017	-010	502 03	A	74A750203
GND4-J017	-010	503 03	В	74A750303
GND4-J017	-070	943 18	A	74R794318
GND4-K101	-010	503 05	В	74A750305
GND4-K102	-010	503 01	В	74A750301
GND4-K103	-010	503 01	В	74A750301
GND4-K103	-010	503 01	В	74A750301
GND4-K104 GND4-L003	-010	502 02	A	74A750202
GND4-L003 GND4-L004	-010	502 02		74A750202 74A750202
			A	
GND4-L004	-010	503 02	В	74A750302
GND4-L101	-010	503 05	В	74A750305
GND4-L102	-010	503 02	В	74A750302
GND4-L103	-010	503 02	В	74A750302
GND4-L104	-010	503 02	В	74A750302
GND4-L105	-010	503 02	В	74A750302
GND4-L106	-010	503 22	В	74A750322
GND4-N001	-060	602 25	A	74A760225
GND4-N001	-060	603 25	В	74A760325
GND4-P001	-050	602 05	A/B	74A760205
GND4-R001	-060	602 21	A/B	74A760221

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND4-R002	-050	602 07	A/B	74A760207
GND4-R003	-050	602 07	A/B	74A760207
GND4-R004	-050	602 07	A/B	74A760207
GND4-U001	-040	542 04	A/B	74A754204
GND4-U002	-040	542 01	A/B	74A754201
GND4-V001	-040	552 01	A/B	74A755201
GND4-V002	-040	552 15	A/B	74A755215
GND4-V003	-040	552 09	A/B	74A755209
GND4-V004	-040	552 04	A/B	74A755204
GND5-B001	-020	522 03	A/B	74A752203
GND5-E001	-020	532 19	A	74A753219
GND5-E001	-030	533 19	В	74A753319
GND5-F002	-020	532 16	A	74A753216
GND5-F002	-030	533 16	В	74A753316
GND5-J001	-010	502 02	A	74A750202
GND5-J001	-010	503 02	В	74A750302
GND5-L102	-010	503 02	В	74A750302
GND5-P001	-060	602 32	A/B	74A760232
GND5-R001	-060	602 34	A/B	74A760234
GND6-K001	-070	705 52	В	74A770552
GND6-K002	-070	705 50	В	74A770550
GND6-K002	-070	705 56	В	74A770556
GND6-L001	-070	705 51	В	74A770551
GND6-L003	-070	705 54	В	74A770554
GND7-A001	-070	700 57	A/B	74A770057
GND7-A001 GND7-C001	-070	700 37	A/B A	74A770037 74A770042
GND7-C001 GND7-C001	-070	700 42	B B	74A770042 74A770542
GND7-C001 GND7-C002	-070	703 42	A	74A770005
GND7-C002 GND7-C002	-070	705 05	B B	74A770003 74A770505
GND7-C002 GND7-C003	-070	703 03	A A	74A770303 74A770005
	-070	705 05	A/B	
GND7-C003	-070	703 03	·	74A770505
GND7-C004	-070	705 05	A	74A770005
GND7-C004	-070	705 05	В	74A770505
GND7-C005	-070 -070	705 05 705 05	В	74A770505
GND7-C006			В	74A770505
GND7-C007	-070	700 42	A	74A770042
GND7-C007	-070	705 42	B	74A770542
GND7-C008	-070	700 50	A/B	74A770050
GND7-E001	-070	700 07	A	74A770007
GND7-E001	-070	705 07	В	74A770507
GND7-E002	-070	700 07	A	74A770007
GND7-E002	-070	705 07	В	74A770507
GND7-F001	-070	700 06	A	74A770006
GND7-F001	-070	705 06	В	74A770506
GND7-F002	-070	700 06	A	74A770006
GND7-F002	-070	705 06	В	74A770506
GND7-F003	-070	700 06	A	74A770006
GND7-F003	-070	705 06	В	74A770506
GND7-F004	-070	700 06	A	74A770006
GND7-F004	-070	705 06	В	74A770506
GND7-H001	-070	700 13	A/B	74A770013
GND7-H003	-070	700 15	A/B	74A770015
GND7-J001	-070	700 30	A/B	74A770030
GND7-J004	-070	700 12	A/B	74A770012
GND7-J005	-070	700 14	A/B	74A770014
GND7-L001	-070	705 53	В	74A770553
GND7-N001	-070	702 01	A/B	74A770201
GND7-N002	-070	702 01	A/B	74A770201

GND7-W GND7-W	****	,	NUMBER		IDENTIFICATION
GND7-W	/001	-070	701 47	A/B	68A770147
i i	V002	-070	701 47	A/B	68A770147
GND7-Y	7001	-070	943 79	A/B	74R794379
GND8-H	1001	-070	700 27	A/B	74A770027
GND8-H	1002	-070	700 19	A/B	74A770019
GND8-H	1003	-070	700 35	A/B	74A770035
GND8-H	1004	-070	700 21	A/B	74A770021
GND8-H	1006	-070	700 23	A	74A770023
GND8-H	1006	-070	705 23	В	74A770523
GND8-H	1007	-070	700 25	A/B	74A770025
GND8-H	8001	-070	700 13	A/B	74A770013
GND8-H	1009	-070	700 29	A/B	74A770029
GND8-H	1010	-070	700 11	A	74A770011
GND8-H	1010	-070	705 11	В	74A770511
GND8-H	1011	-010	502 01	A	74A750201
GND8-H	1011	-010	503 01	В	74A750301
GND8-H	1012	-070	700 33	A/B	74A770033
GND8-J0	001	-070	700 12	A/B	74A770012
GND8-J0	002	-070	700 14	A/B	74A770014
GND8-J0	003	-070	700 16	A/B	74A770016
GND8-J0	004	-070	700 18	A/B	74A770018
GND8-J0	005	-070	700 20	A/B	74A770020
GND8-K	.001	-070	705 43	В	74A770543
GND9-A	.004	-020	532 11	A	74A753211
GND9-A	.004	-030	533 11	В	74A753311
GND9-A	.005	-020	522 03	A/B	74A752203
GND9-A	.008	-020	532 11	A	74A753211
GND9-A	.008	-020	532 16	A	74A753216
GND9-A	.008	-030	533 11	В	74A753311
GND9-A	.008	-030	533 16	В	74A753316
GND9-A	.008	-070	943 35	A/B	74R794335
GND9-A	.009	-020	532 11	A	74A753211
GND9-A	.009	-030	532 38	A/B	74A753238
GND9-A	.009	-030	533 11	В	74A753311
GND9-B	001	-020	532 16	A	74A753216
GND9-B	001	-030	533 16	В	74A753316
GND9-B	002	-020	522 05	A/B	74A752205
GND9-B	002	-020	532 16	A	74A753216
GND9-B	002	-030	533 16	В	74A753316
GND9-B	003	-020	532 16	A	74A753216
GND9-B	003	-030	533 16	В	74A753316
GND9-B	004	-020	522 03	A/B	74A752203
GND9-B	006	-020	522 03	A/B	74A752203
GND9-C		-020	532 11	A	74A753211
GND9-C		-030	533 11	В	74A753311
GND9-C		-020	532 09	A/B	74A753209
GND9-C	2007	-020	532 11	A	74A753211
GND9-C	007	-030	532 25	A/B	74A753225
GND9-C		-030	533 11	В	74A753311
GND9-C		-030	533 19	В	74A753319
GND9-C		-020	532 04	A	74A753204
GND9-C		-020	532 11	A	74A753211
GND9-C		-030	533 04	В	74A753304
GND9-C		-030	533 11	В	74A753311
GND9-C		-070	943 36	A/B	74R794336
GND9-C		-020	532 05	A/B	74A753205
GND9-C		-020	532 11	A	74A753211
GND9-C		-020	532 19	A	74A753219

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND9-C011	-030	532 25	A/B	74A753225
GND9-C011	-030	533 11	В	74A753311
GND9-C011	-030	533 19	В	74A753319
GND9-C011	-070	943 39	A/B	74R794339
GND9-C012	-020	532 17	A	74A753217
GND9-C012	-030	533 17	В	74A753317
GND9-C013	-020	532 19	A	74A753219
GND9-C013	-030	533 19	В	74A753319
GND9-C013	-070	943 63	A/B	74R794363
GND9-C014	-020	532 01	A	74A753201
GND9-C014	-020	532 04	A	74A753204
GND9-C014	-030	533 01	В	74A753301
GND9-C014	-030	533 04	В	74A753304
GND9-C014	-070	943 31	A/B	74R794331
GND9-D003	-020	532 12	A	74A753212
GND9-D003	-020	532 14	A	74A753214
GND9-D003	-020	532 16	A	74A753216
GND9-D003	-020	532 18	A	74A753218
GND9-D003	-030	532 37	A/B	74A753237
GND9-D003	-030	533 12	В	74A753312
GND9-D003	-030	533 14	В	74A753314
GND9-D003	-030	533 16	В	74A753316
GND9-D003	-030	533 18	В	74A753318
GND9-D003	-070	943 40	A/B	74R794340
GND9-D003	-070	943 68	A/B	74R794368
GND9-D003	-070	943 69	A/B	74R794369
GND9-D009	-020	532 12	A	74A753212
GND9-D009	-030	533 12	В	74A753312
GND9-D011	-020	532 12	A	74A753212
GND9-D011	-030	533 12	В	74A753312
GND9-D013	-020	532 10	A/B	74A753210
GND9-D013	-020	532 12	A	74A753212
GND9-D013	-030	532 29	A/B	74A753229
GND9-D013	-030	532 36	A/B	74A753236
GND9-D013	-030	533 12	В	74A753312
GND9-D016	-020	532 02	A	74A753202
GND9-D016	-020	532 04	A	74A753204
GND9-D016	-030	533 02	В	74A753302
GND9-D016	-030	533 04	В	74A753304
GND9-E001	-020	532 19	A	74A753219
GND9-E001	-030	533 19	В	74A753319
GND9-E002	-020	532 17	A	74A753217
GND9-E002	-030	533 17	В	74A753317
GND9-E002	-070	943 27	В	74R794327
GND9-E002	-070	943 30	В	74R794330
GND9-E007	-020	532 16	A	74A753216
GND9-E007	-020	532 19	A	74A753219
GND9-E007	-030	533 16	В	74A753316
GND9-E007	-030	533 19	В	74A753319
GND9-E008	-020	532 19	A	74A753219
GND9-E008	-030	533 19	В	74A753319
GND9-E011	-020	532 17	A	74A753217
GND9-E011	-020	532 19	A	74A753219
GND9-E011	-030	533 17	В	74A753317
GND9-E011	-030	533 19	В	74A753319
GND9-E012	-020	532 19	A	74A753219
GND9-E012	-030	533 19	В	74A753319
GND9-E013	-030	533 17	В	74A753317

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND9-F004	-020	532 12	A	74A753212
GND9-F004	-020	532 18	A	74A753218
GND9-F004	-030	533 12	В	74A753312
GND9-F004	-030	533 18	В	74A753318
GND9-F014	-020	532 02	A	74A753202
GND9-F014	-030	533 02	В	74A753302
GND9-F015	-020	532 01	A	74A753201
GND9-F015	-020	532 02	A	74A753202
GND9-F015	-020	532 16	A	74A753216
GND9-F015	-030	533 01	В	74A753301
GND9-F015	-030	533 02	В	74A753302
GND9-F015	-030	533 16	В	74A753316
GND9-F017	-030	532 30	A	74A753230
GND9-F017	-030	533 30	В	74A753330
GND9-F018	-020	532 03	A	74A753203
GND9-F018	-020	532 04	A	74A753204
GND9-F018	-020	532 18	A	74A753218
GND9-F018	-030	533 03	В	74A753303
GND9-F018	-030	533 04	В	74A753304
GND9-F018	-030	533 18	В	74A753318
GND9-F019	-020	532 16	A	74A753216
GND9-F019	-030	533 16	В	74A753316
GND9-F020	-020	532 16	A	74A753216
GND9-F020	-020	532 17	A	74A753217
GND9-F020	-030	533 16	В	74A753316
GND9-F020	-030	533 17	В	74A753317
GND9-F021	-020	532 18	A	74A753218
GND9-F021	-030	533 18	В	74A753318
GND9-F022	-020	532 03	A	74A753203
GND9-F022	-020	532 04	A	74A753204
GND9-F022	-020	532 14	A	74A753214
GND9-F022	-030	533 03	В	74A753303
GND9-F022	-030	533 04	В	74A753304
GND9-F022	-030	533 14	В	74A753314
GND9-F029	-020	532 03	A	74A753203
GND9-F029	-030	533 03	В	74A753303
GND9-F030	-020	532 02	A	74A753202
GND9-F030	-020	532 16	A	74A753216
GND9-F030	-030	533 02	В	74A753302
GND9-F030	-030	533 16	В	74A753316
GND9-F033	-020	532 12	A	74A753212
GND9-F033	-020	532 16	A	74A753216
GND9-F033	-030	533 12	В	74A753312
GND9-F033	-030	533 16	В	74A753316
GND9-F034	-020	532 01	A	74A753201
GND9-F034	-020	532 14	A	74A753214
GND9-F034	-030	533 01	В	74A753301
GND9-F034	-030	533 14	В	74A753314
GND9-F036	-020	532 16	A	74A753216
GND9-F036	-030	533 16	В	74A753316
GND9-F037	-020	532 16	A	74A753216
GND9-F037	-030	533 16	В	74A753316
GND9-F038	-020	532 14	A	74A753214
GND9-F038	-020	532 19	A	74A753219
GND9-F038	-030	533 14	В	74A753314
GND9-F038	-030	533 19	В	74A753319
GND9-F041	-020	532 04	A	74A753204
GND9-F041	-030	533 04	В	74A753304

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND9-F042	-060	602 25	A	74A760225
GND9-H001	-010	502 01	A	74A750201
GND9-H001	-010	502 07	A	74A750207
GND9-H001	-010	503 01	В	74A750301
GND9-H001	-010	503 07	В	74A750307
GND9-H004	-010	502 01	A	74A750201
GND9-H004	-010	503 01	В	74A750301
GND9-H005	-010	502 01	A	74A750201
GND9-H005	-010	502 03	A	74A750203
GND9-H005	-010	503 01	В	74A750301
GND9-H005	-010	503 03	В	74A750303
GND9-H006	-010	502 01	A	74A750201
GND9-H006	-010	503 01	В	74A750301
GND9-H009	-010	502 01	A	74A750201
GND9-H009	-010	502 07	A	74A750207
GND9-H009	-010	503 01	В	74A750301
GND9-H009	-010	503 07	В	74A750307
GND9-H011	-010	502 01	A	74A750201
GND9-H011	-010	503 01	В	74A750301
GND9-H012	-010	502 01	A	74A750201
GND9-H012	-010	502 07	A	74A750207
GND9-H012	-010	503 01	В	74A750301
GND9-H012	-010	503 07	В	74A750307
GND9-J004	-010	502 02	A	74A750202
GND9-J004	-010	503 02	В	74A750302
GND9-J005	-010	502 02	A	74A750202
GND9-J005	-010	503 02	В	74A750302
GND9-J006	-010	502 02	A	74A750202
GND9-J006	-010	503 02	В	74A750302
GND9-J007	-010	502 02	A	74A750202
GND9-J007	-010	503 02	В	74A750302
GND9-J015	-010	502 03	A	74A750203
GND9-J015	-010	502 07	A	74A750207
GND9-J015	-010	502 08	A	74A750208
GND9-J015	-010	503 03	В	74A750303
GND9-J015	-010	503 07	В	74A750307
GND9-J015	-010	503 08	В	74A750308
GND9-J017	-010	502 02	A	74A750202
GND9-J017	-010	503 02	В	74A750302
GND9-J017	-070	943 58	A/B	74R794358
GND9-J019	-010	502 07	A	74A750207
GND9-J019	-010	502 08	A	74A750208
GND9-J019	-010	503 07	В	74A750307
GND9-J019	-010	503 08	В	74A750308
GND9-J019	-070	943 32	A	74R794332
GND9-J019	-070	943 33	В	74R794333
GND9-J028	-010	502 10	A	74A750210
GND9-J028	-010	503 10	В	74A750310
GND9-K001	-010	502 01	A	74A750201
GND9-K002	-010	502 02	A	74A750202
GND9-K101	-010	503 05	В	74A750305
GND9-K101	-010	503 07	В	74A750307
GND9-K101	-010	503 08	В	74A750308
GND9-K102	-010	503 01	В	74A750301
GND9-K103	-010	503 01	В	74A750301
GND9-K104	-010	503 01	В	74A750301
GND9-K106	-010	503 01	В	74A750301
GND9-K106	-010	503 05	В	74A750305

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND9-K106	-010	503 07	В	74A750307
GND9-L004	-010	503 02	В	74A750302
GND9-L010	-010	502 01	A	74A750201
GND9-L010	-010	502 02	A	74A750202
GND9-L011	-010	502 14	A	74A750214
GND9-L011	-010	503 02	В	74A750302
GND9-L012	-010	502 02	A	74A750202
GND9-L012	-070	943 18	A	74R794318
GND9-L013	-010	502 02	A	74A750202
GND9-L013	-070	943 18	A	74R794318
GND9-L101	-010	503 01	В	74A750301
GND9-L101	-010	503 05	В	74A750305
GND9-L102	-010	503 02	В	74A750302
GND9-L103	-010	503 02	В	74A750302
GND9-L104	-010	503 02	В	74A750302
GND9-M001	-060	602 26	A	74A760226
GND9-M001	-060	602 35	A/B	74A760235
GND9-M001	-060	603 26	В	74A760326
GND9-M002	-050	602 01	A	74A760201
GND9-M002	-050	602 02	A/B	74A760202
GND9-M002	-060	603 01	В	74A760301
GND9-M003	-050	602 01	A	74A760201
GND9-M003	-050	602 04	A/B	74A760204
GND9-M003	-060	603 01	В	74A760301
GND9-M003	-060	603 03	В	74A760303
GND9-M003	-070	986 08	A/B	74R798608
GND9-M004	-050	602 05	A/B	74A760205
GND9-M005	-050	602 02	A/B A/B	74A760203
GND9-M005	-050	602 04	A/B A/B	74A760202
GND9-M005	-060	603 03	B A/B	74A760303
GND9-M005	-070	986 09	A/B	74R798609
GND9-M005	-070	986 10	A/B A/B	74R798610
GND9-M005 GND9-M006	-050	602 03	A/B A	74A760203
GND9-M006 GND9-M006	-060	603 03	B	74A760303
GND9-M000 GND9-M007	-050	602 05	A/B	74A760205
GND9-M007	-060	602 26	A A	74A760226
GND9-M007 GND9-M008	-050	602 05	A/B	74A760220 74A760205
GND9-M009	-040	542 11	A/B A/B	74A754211
GND9-M009 GND9-M010	-040	542 13	A/B A/B	74A754211 74A754213
GND9-M010 GND9-M011	-040	602 49	A/B A/B	74A754213 74A760249
GND9-M011 GND9-M011	-060	602 50	A/B A/B	74A760249 74A760250
GND9-N011 GND9-N001	-040	552 13	A/B A/B	74A760230 74A755213
GND9-N001 GND9-N002	-040	602 25	A/B A	74A753215 74A760225
GND9-N002	-060 050	603 25	B A/B	74A760325
GND9-N003	-050 050	602 07	A/B	74A760207
GND9-N004	-050	602 07	A/B	74A760207
GND9-N004	-060	602 25	A A /B	74A760225
GND9-N006	-040	552 13	A/B	74A755213
GND9-P001	-060	602 32	A/B	74A760232
GND9-P002	-050	602 05	A/B	74A760205
GND9-P003	-050	602 07	A/B	74A760207
GND9-P003	-060	602 35	A/B	74A760235
GND9-P004	-060	602 32	A/B	74A760232
GND9-P005	-060	602 26	A	74A760226
GND9-P005	-060	603 26	В	74A760326
GND9-P009	-050	602 05	A/B	74A760205
GND9-P012	-050	602 05	A/B	74A760205
GND9-P013	-050	602 07	A/B	74A760207

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND9-P014	-050	602 07	A/B	74A760207
GND9-P015	-050	602 05	A/B	74A760205
GND9-P015	-050	602 07	A/B	74A760207
GND9-P016	-050	602 05	A/B	74A760205
GND9-P017	-050	602 05	A/B	74A760205
GND9-R001	-060	602 34	A/B	74A760234
GND9-R002	-060	602 34	A/B	74A760234
GND9-R005	-050	602 07	A/B	74A760207
GND9-R008	-050	602 13	A/B	74A760213
GND9-R008	-060	602 34	A/B	74A760234
GND9-R009	-050	602 13	A/B	74A760213
GND9-R009	-060	602 25	A	74A760225
GND9-R009	-060	603 25	В	74A760325
GND9-R012	-060	602 25	A	74A760225
GND9-R012	-060	603 25	В	74A760325
GND9-R015	-050	602 07	A/B	74A760207
GND9-S001	-060	612 22	A/B	74A761222
GND9-S002	-050	602 01	A	74A760201
GND9-S002	-060	603 01	В	74A760301
GND9-S002	-050	602 01	A	74A760201
GND9-S003	-060	603 01	B	74A760301
GND9-S003	-060	612 02	A/B	74A761202
GND9-S004	-050	602 01	A	74A760201
GND9-S004	-060	603 01	В	74A760301
GND9-S004	-060	603 26	В	74A760326
GND9-S004	-060	612 04	A/B	74A761204
GND9-S005	-060	602 26	A	74A760226
GND9-S006	-070	702 oo	A/B	74A770220
GND9-S007	-070	702 00	A/B A/B	74A770200
GND9-S008	-050	602 03	A A	74A770200 74A760203
GND9-S008	-060	603 03	B	74A760303
GND9-S009	-060	612 04	A/B	74A761204
GND9-S010	-070	702 00	A/B A/B	74A770200
GND9-T001	-060	602 25	A	74A760225
GND9-T001	-060	603 25	В	74A760325
GND9-T003	-060	602 25	A	74A760225
GND9-T003	-060	603 25	B	74A760325
GND9-T003	-060	602 25	A	74A760325
GND9-T004	-060	603 25	В	74A760325
GND9-T005	-050	602 01	A	74A760201
GND9-T005	-060	603 01	B	74A760301
GND9-T005	-060	612 02	A/B	74A761202
GND9-T003 GND9-T006	-050	602 03	A/B A	74A760203
GND9-T006	-060	603 03	B	74A760303
GND9-T006 GND9-T006	-060	612 02	A/B	74A760303 74A761202
GND9-T000 GND9-T007	-060	612 11	A/B A/B	74A761202 74A761211
GND9-T007 GND9-T008	-070	702 00	A/B A/B	74A770200
GND9-T008 GND9-T009	-070	702 00	A/B A/B	74A770200 74A770200
GND9-T009 GND9-T010	-070	612 04	A/B A/B	74A770200 74A761204
GND9-T010 GND9-T011	-050	602 03	A/B A	74A760203
GND9-T011 GND9-T011	-060	603 03	B	74A760303
GND9-T011 GND9-T013	-070	702 00	A/B	74A770200
GND9-1013 GND9-U001	-040	542 09	A/B A/B	74A770200 74A754209
GND9-U001 GND9-U001	-040	542 09 542 15	A/B A/B	74A754209 74A754215
GND9-U001 GND9-U002	-040	542 13 542 01	A/B A/B	74A754213 74A754201
GND9-U002 GND9-U003	-040	542 01	A/B A/B	
GND9-U003 GND9-U004	-040 -040	542 01 542 04	A/B A/B	74A754201 74A754204
GND9-U004 GND9-U005	-040	542 04 542 04	A/B A/B	74A754204 74A754204
GMD3-0003	-040	J42 U4	A/D	/4A/J4ZU4

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
GND9-U006	-040	542 01	A/B	74A754201
GND9-U007	-040	542 03	A/B	74A754203
GND9-U010	-040	542 05	A/B	74A754205
GND9-U012	-060	602 36	A/B	74A760236
GND9-U012	-060	602 37	A/B	74A760237
GND9-U013	-040	542 07	A/B	74A754207
GND9-U015	-050	602 01	A	74A760201
GND9-U015	-050	602 03	A	74A760203
GND9-U015	-060	603 01	В	74A760301
GND9-U015	-060	603 03	В	74A760303
GND9-V001	-040	552 01	A/B	74A755201
GND9-V002	-040	552 01	A/B	74A755201
GND9-V003	-040	552 04	A/B	74A755204
GND9-V004	-040	552 09	A/B	74A755209
GND9-V007	-040	552 03	A/B	74A755203
GND9-V007 GND9-V008	-040	552 05	A/B A/B	74A755205
GND9-V008	-040	552 15	A/B A/B	74A755205 74A755215
GND9-V012	-060	602 38	A/B A/B	74A753213 74A760238
GND9-V012	-060	602 39	A/B A/B	74A760239
GND9-V012 GND9-V013	-040 -040	552 07	A/B A/B	74A700239 74A755207
GND9-V015 GND9-V015	-040 -050	602 01		74A753207 74A760201
		602 01	A	
GND9-V015	-050	602 03	A B	74A760203 74A760301
GND9-V015	-060			
GND9-V015	-060	603 03	B	74A760303
GND9-Y002	-040	562 10	A/B	68A756210
GND9-Y002	-040	562 12	A/B	68A756212
GND9-Y002	-070	703 00	A/B	68A770300
WTA002	-020	532 11	A	74A753211
WTA002	-020	532 16	A	74A753216
WTA002	-020	532 17	A	74A753217
WTA002	-030	533 11	В	74A753311
WTA002	-030	533 16	В	74A753316
WTA002	-030	533 17	В	74A753317
WTA002	-030	533 19	В	74A753319
WTB001	-020	532 11	A	74A753211
WTB001	-020	532 16	A	74A753216
WTB001	-030	533 11	В	74A753311
WTB001	-030	533 16	В	74A753316
WTB002	-020	522 04	A/B	74A752204
WTB002	-070	701 03	A/B	74A770103
WTB002	-070	701 22	A/B	74A770122
WTC001	-020	532 09	A/B	74A753209
WTC001	-020	532 11	A	74A753211
WTC001	-020	532 16	A	74A753216
WTC001	-020	532 17	A	74A753217
WTC001	-020	532 19	A	74A753219
WTC001	-030	532 23	A/B	74A753223
WTC001	-030	532 26	A/B	74A753226
WTC001	-030	533 11	В	74A753311
WTC001	-030	533 17	В	74A753317
WTC001	-030	533 19	В	74A753319
WTC001	-070	701 36	A/B	74A770136
WTC002	-020	532 04	A	74A753204
WTC002	-020	532 05	A/B	74A753205
WTC002	-020	532 11	A	74A753211
WTC002	-020	532 12	A	74A753212
WTC002	-020	532 16	A	74A753216
WTC002	-020	532 17	A	74A753217

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
WTC002	-020	532 19	A	74A753219
WTC002	-030	532 26	A/B	74A753226
WTC002	-030	532 38	A/B	74A753238
WTC002	-030	533 04	В	74A753304
WTC002	-030	533 11	В	74A753311
WTC002	-030	533 12	В	74A753312
WTC002	-030	533 16	В	74A753316
WTC002	-030	533 17	В	74A753317
WTC002	-030	533 19	В	74A753319
WTC002	-070	943 36	A/B	74R794336
WTC002	-070	943 39	A/B	74R794339
WTC002	-070	943 40	A/B	74R794340
WTC003	-020	532 17	A	74A753217
WTC003	-030	533 17	В	74A753317
WTC003	-070	701 58	A/B	74A770158
WTC004	-020	532 11	A A	74A770136 74A753211
WTC004	-030	533 11	B	74A753211 74A753311
WTC004	-070	701 35	A/B	74A770135
WTC005	-020	532 03	A/B A	74A770133 74A753203
WTC005	-020 -020	532 03		74A753203 74A753204
WTC005	-020	532 04	A B	74A753204 74A753303
	-030	533 03	В	
WTC005 WTC006	-030 -020	532 01		74A753304
			A	74A753201
WTC006	-020	532 02	A	74A753202
WTC006	-030	533 01	В	74A753301
WTC006	-030	533 02	В	74A753302
WTD001	-020	532 02	A	74A753202
WTD001	-020	532 03	A	74A753203
WTD001	-020	532 10	A/B	74A753210
WTD001	-020	532 12	A	74A753212
WTD001	-020	532 14	A	74A753214
WTD001	-020	532 16	A	74A753216
WTD001	-030	533 02	В	74A753302
WTD001	-030	533 03	В	74A753303
WTD001	-030	533 12	В	74A753312
WTD001	-030	533 14	В	74A753314
WTD001	-030	533 16	В	74A753316
WTD001	-070	943 57	A	74R794357
WTD002	-020	532 08	A/B	74A753208
WTD002	-030	532 23	A/B	74A753223
WTD002	-030	532 36	A/B	74A753236
WTD002	-030	532 37	A/B	74A753237
WTD002	-030	532 38	A/B	74A753238
WTEN01	-030	533 11	В	74A753311
WTE001	-020	532 01	A	74A753201
WTE001	-020	532 02	A	74A753202
WTE001	-020	532 03	A	74A753203
WTE001	-020	532 04	A	74A753204
WTE001	-020	532 11	A	74A753211
WTE001	-020	532 12	A	74A753212
WTE001	-020	532 14	A	74A753214
WTE001	-020	532 16	A	74A753216
WTE001	-020	532 17	A	74A753217
WTE001	-020	532 18	A	74A753218
WTE001	-020	532 19	A	74A753219
WTE001	-030	533 01	В	74A753301
WTE001	-030	533 02	В	74A753302
WTE001	-030	533 03	В	74A753303

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
WTE001	-030	533 04	В	74A753304
WTE001	-030	533 11	В	74A753311
WTE001	-030	533 12	В	74A753312
WTE001	-030	533 14	В	74A753314
WTE001	-030	533 16	В	74A753316
WTE001	-030	533 17	В	74A753317
WTE001	-030	533 18	В	74A753318
WTE001	-030	533 19	В	74A753319
WTE001	-030	533 22	В	74A753322
WTE001	-070	943 63	A/B	74R794363
WTE002	-020	532 02	A	74A753202
WTE002	-020	532 11	A	74A753211
WTE002	-020	532 12	A	74A753212
WTE002	-020	532 14	A	74A753214
WTE002	-020	532 16	A	74A753216
WTE002	-020	532 17	A	74A753217
WTE002	-020	532 18	A	74A753218
WTE002	-020	532 19	A	74A753219
WTE002	-030	533 02	В	74A753302
WTE002	-030	533 11	В	74A753311
WTE002	-030	533 12	В	74A753312
WTE002	-030	533 14	В	74A753314
WTE002	-030	533 16	В	74A753316
WTE002	-030	533 17	В	74A753317
WTE002	-030	533 18	В	74A753318
WTE002	-030	533 19	В	74A753319
WTE003	-020	532 04	A	74A753204
WTE003	-020	532 11	A	74A753211
WTE003	-020	532 12	A	74A753212
WTE003	-020	532 14	A	74A753214
WTE003	-020	532 16	A	74A753216
WTE003	-020	532 17	A	74A753217
WTE003	-020	532 18	A	74A753218
WTE003	-020	532 19	A	74A753219
WTE003	-030	533 04	В	74A753304
WTE003	-030	533 11	В	74A753311
WTE003	-030	533 12	В	74A753312
WTE003	-030	533 14	В	74A753314
WTE003	-030	533 16	В	74A753316
WTE003	-030	533 17	В	74A753317
WTE003	-030	533 18	В	74A753318
WTE003	-030	533 19	В	74A753319
WTE003	-070	943 36	A/B	74R794336
WTE003	-070	943 63	A/B	74R794363
WTF001	-020	532 01	A	74A753201
WTF001	-020	532 02	A	74A753202
WTF001	-020	532 03	A	74A753203
WTF001	-020	532 04	A	74A753204
WTF001	-020	532 11	A	74A753211
WTF001	-020	532 12	A	74A753212
WTF001	-020	532 14	A	74A753214
WTF001	-020	532 16	A	74A753216
WTF001	-020	532 17	A	74A753217
WTF001	-020	532 18	A	74A753218
WTF001	-020	532 19	A	74A753219
WTF001	-030	533 01	В	74A753301
WTF001	-030	533 02	В	74A753302

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
WTF001	-030	533 04	В	74A753304
WTF001	-030	533 11	В	74A753311
WTF001	-030	533 12	В	74A753312
WTF001	-030	533 14	В	74A753314
WTF001	-030	533 16	В	74A753316
WTF001	-030	533 17	В	74A753317
WTF001	-030	533 18	В	74A753318
WTF001	-030	533 19	В	74A753319
WTF001	-030	533 22	В	74A753322
WTF001	-060	612 13	В	74A761213
WTF001	-070	943 17	A	74R794317
WTF001	-070	943 29	A	74R794317 74R794329
WTF001	-070	943 36	A/B	74R794329 74R794336
WTF001	-070	943 39	A/B A/B	74R794339
WTF001	-070	943 40	A/B A/B	74R794339 74R794340
WTF002	-070	532 02	A/B A	74K794340 74A753202
WTF002 WTF002	-020 -020	532 02		
WTF002 WTF002	-020 -020	532 03	A	74A753203 74A753204
			A	
WTF002	-020	532 11	A	74A753211
WTF002	-020	532 12	A	74A753212
WTF002	-020	532 14	A	74A753214
WTF002	-020	532 16	A	74A753216
WTF002	-020	532 17	A	74A753217
WTF002	-020	532 18	A	74A753218
WTF002	-020	532 19	A	74A753219
WTF002	-030	532 30	A	74A753230
WTF002	-030	533 02	В	74A753302
WTF002	-030	533 03	В	74A753303
WTF002	-030	533 04	В	74A753304
WTF002	-030	533 11	В	74A753311
WTF002	-030	533 12	В	74A753312
WTF002	-030	533 14	В	74A753314
WTF002	-030	533 16	В	74A753316
WTF002	-030	533 17	В	74A753317
WTF002	-030	533 18	В	74A753318
WTF002	-030	533 19	В	74A753319
WTF002	-030	533 22	В	74A753322
WTF002	-030	533 30	В	74A753330
WTF002	-070	943 68	A/B	74R794368
WTF002	-070	943 69	A/B	74R794369
WTF003	-020	532 01	A	74A753201
WTF003	-020	532 02	A	74A753202
WTF003	-020	532 03	A	74A753203
WTF003	-020	532 04	A	74A753204
WTF003	-020	532 12	A	74A753212
WTF003	-020	532 14	A	74A753214
WTF003	-020	532 16	A	74A753216
WTF003	-020	532 18	A	74A753218
WTF003	-030	533 01	В	74A753301
WTF003	-030	533 02	В	74A753302
WTF003	-030	533 03	В	74A753303
WTF003	-030	533 04	В	74A753304
WTF003	-030	533 12	В	74A753312
WTF003	-030	533 14	В	74A753314
WTF003	-030	533 16	В	74A753316
WTF003	-030	533 18	В	74A753318
WTF003	-030	533 19	В	74A753319
WTF003	-030	533 22	В	74A753322

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
WTF003	-070	701 29	A/B	74A770129
WTF004	-020	532 02	A	74A753202
WTF004	-020	532 12	A	74A753212
WTF004	-020	532 14	A	74A753214
WTF004	-020	532 16	A	74A753216
WTF004	-020	532 17	A	74A753217
WTF004	-020	532 19	A	74A753219
WTF004	-030	532 30	A	74A753230
WTF004	-030	533 02	В	74A753302
WTF004	-030	533 12	В	74A753312
WTF004	-030	533 14	В	74A753314
WTF004	-030	533 16	В	74A753316
WTF004	-030	533 17	В	74A753317
WTF004	-030	533 19	В	74A753319
WTF004	-030	533 30	В	74A753330
WTF005	-020	532 02	A	74A753202
WTF005	-020	532 04	A	74A753202 74A753204
WTF005	-020	532 11	A	74A753204 74A753211
WTF005	-020	532 11	A	74A753211 74A753212
WTF005	-020 -020	532 12		74A753212 74A753214
WTF005	-020 -020	532 14	A	74A753214 74A753216
	-020 -020	532 16	A	
WTF005 WTF005	-020 -020	532 17	A	74A753217
			A	74A753218
WTF005	-020	532 19	A	74A753219
WTF005	-030	533 02	В	74A753302
WTF005	-030	533 04	В	74A753304
WTF005	-030	533 11	В	74A753311
WTF005	-030	533 12	В	74A753312
WTF005	-030	533 14	В	74A753314
WTF005	-030	533 16	В	74A753316
WTF005	-030	533 17	В	74A753317
WTF005	-030	533 18	В	74A753318
WTF005	-030	533 19	В	74A753319
WTF005	-030	533 22	В	74A753322
WTF006	-020	532 01	A	74A753201
WTF006	-020	532 02	A	74A753202
WTF006	-020	532 03	A	74A753203
WTF006	-020	532 04	A	74A753204
WTF006	-020	532 11	A	74A753211
WTF006	-020	532 12	A	74A753212
WTF006	-020	532 14	A	74A753214
WTF006	-020	532 16	A	74A753216
WTF006	-020	532 17	A	74A753217
WTF006	-020	532 18	A	74A753218
WTF006	-020	532 19	A	74A753219
WTF006	-030	533 01	В	74A753301
WTF006	-030	533 02	В	74A753302
WTF006	-030	533 03	В	74A753303
WTF006	-030	533 04	В	74A753304
WTF006	-030	533 11	В	74A753311
WTF006	-030	533 12	В	74A753312
WTF006	-030	533 14	В	74A753314
WTF006	-030	533 16	В	74A753316
WTF006	-030	533 17	В	74A753317
WTF006	-030	533 18	В	74A753318
WTF006	-030	533 19	В	74A753319
WTF006	-030	533 22	В	74A753322
WTF007	-020	532 04	A	74A753204

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
WTF007	-020	532 11	A	74A753211
WTF007	-020	532 12	A	74A753212
WTF007	-020	532 14	A	74A753214
WTF007	-020	532 16	A	74A753216
WTF007	-020	532 17	A	74A753217
WTF007	-020	532 18	A	74A753218
WTF007	-020	532 19	A	74A753219
WTF007	-030	533 04	В	74A753304
WTF007	-030	533 11	В	74A753311
WTF007	-030	533 12	В	74A753312
WTF007	-030	533 14	В	74A753314
WTF007	-030	533 16	В	74A753316
WTF007	-030	533 17	В	74A753317
WTF007	-030	533 18	В	74A753318
WTF007	-030	533 19	В	74A753319
WTF007	-030	533 22	В	74A753322
WTF008	-020	532 16	A	74A753216
WTF008	-030	533 16	В	74A753316
WTF008	-070	701 31	A/B	74A770131
WTF009	-060	602 25	A	74A760225
WTF010	-020	532 18	A	74A753218
WTF010	-030	533 18	В	74A753318
WTF010	-030	533 22	В	74A753322
WTF010	-070	701 29	A/B	74A770129
WTH001	-010	502 01	A	74A750201
WTH001	-010	502 02	A	74A750202
WTH001	-010	502 03	A	74A750203
WTH001	-010	502 07	A	74A750207
WTB001	-010	503 01	В	74A750301
WTH001	-010	503 02	В	74A750302
WTH001	-010	503 03	В	74A750303
WTH001	-010	503 07	В	74A750307
WTH001	-070	701 27	A/B	74A770127
WTB001	-070	701 68	A/B	74A770168
WTJ001	-010	502 01	A	74A750201
WTJ001	-010	502 02	A	74A750202
WTJ001	-010	502 03	A	74A750203
WTJ001	-010	502 07	A	74A750207
WTJ001	-010	502 08	A	74A750208
WTJ001	-010	503 01	В	74A750301
WTJ001	-010	503 02	В	74A750302
WTJ001	-010	503 03	В	74A750303
WTJ001	-010	503 07	В	74A750307
WTJ001	-010	503 08	В	74A750308
WTJ001	-070	701 72	A/B	74A770172
WTJ001	-070	943 58	A/B	74R794358
WTK001	-010	503 01	В	74A750301
WTK001	-010	503 02	В	74A750302
WTK001	-010	503 03	В	74A750303
WTK001	-010	503 05	В	74A750305
WTK001	-070	706 75	В	74A770675
WTK002	-010	503 01	В	74A750301
WTK002	-010	503 02	В	74A750302
WTK002	-010	503 05	В	74A750305
WTK002	-010	503 07	В	74A750307
WTK002	-010	503 08	В	74A750308
WTK002	-010	503 10	В	74A750310
WTK002	-030	533 04	В	74A753304

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
WTL001	-010	502 01	A	74A750201
WTL001	-010	502 02	A	74A750202
WTL001	-010	502 07	A	74A750207
WTL001	-010	502 08	A	74A750208
WTL001	-010	502 10	A	74A750210
WTL001	-010	502 14	A	74A750214
WTL001	-010	503 02	В	74A750302
WTL001	-010	503 03	В	74A750303
WTL001	-010	503 05	В	74A750305
WTL001	-010	503 08	В	74A750308
WTL001	-010	503 10	В	74A750310
WTL001	-010	503 20	В	74A750320
WTL001	-030	533 12	В	74A753312
WTL001	-070	701 19	A	74A770119
WTL001	-070	701 20	A	74A770120
WTL001	-070	701 28	A/B	74A770128
WTL001	-070	706 78	В	74A770678
WTL002	-010	502 16	A	74A770078 74A750216
WTL002	-010	502 18	A	74A750218
WTL002 WTL002	-010	503 16	B	74A750216 74A750316
WTL002 WTL002	-010 -010	503 16	В	74A750316 74A750318
WTL002	-010	503 23	В	74A750318 74A750323
WTL002 WTL002	-010	701 37	A	74A770137
WTL002	-070	701 38	В	74A770138
WTL002	-070	701 39	A	74A770139
WTL002	-070	701 40	В	74A770140
WTM002	-050	602 05	A/B	74A760205
WTM002	-050	602 07	A/B	74A760207
WTM002	-060	602 25	A	74A760225
WTM002	-060	602 26	A	74A760226
WTM002	-060	603 25	В	74A760325
WTM002	-060	603 26	В	74A760326
WTM015	-040	542 13	A/B	74A754213
WTM015	-050	602 05	A/B	74A760205
WTM015	-060	602 26	A	74A760226
WTM015	-060	603 26	В	74A760326
WTM016	-040	542 16	A/B	74A754216
WTM016	-060	602 26	A	74A760226
WTM016	-060	603 26	В	74A760326
WTM016	-070	701 21	A/B	74A770121
WTN002	-050	602 07	A/B	74A760207
WTN002	-060	602 25	A	74A760225
WTN002	-060	603 25	В	74A760325
WTN015	-040	552 13	A/B	74A755213
WTN015	-060	602 25	A	74A760225
WTN015	-060	603 25	В	74A760325
WTP001	-050	602 05	A/B	74A760205
WTP001	-050	602 07	A/B	74A760207
WTP001	-050	602 13	A/B	74A760213
WTP001	-060	602 25	A	74A760225
WTP001	-060	602 26	A	74A760226
WTP001	-060	602 35	A/B	74A760235
WTP001	-060	603 25	В	74A760325
WTP001	-060	603 26	В	74A760326
WTP003	-060	602 25	A	74A760225
WTP003	-060	602 26	A	74A760226
WTP003	-060	603 25	В	74A760325
i	-060	603 26	В	74A760326

WTF00H	REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
WTF006	WTP004	-060	602 20	A/B	74A760220
WTF006	WTP004	-060	602 32	A/B	74A760232
WTP007	WTP006	-050	602 05	A/B	74A760205
WTF007	WTP006	-070	702 00	A/B	74A770200
WTF008	WTP007	-050	602 05	A/B	74A760205
WTP009	WTP007	-050	602 07	A/B	74A760207
WTP009	WTP008		602 07	A/B	74A760207
WTP009					
WTP009	WTP009	-060	602 25	A	74A760225
WTP010					
WTP010					
WTP010 -070 602 05 A/B 74A770200 WTR001 -050 602 05 A/B 74A760205 WTR001 -050 602 07 A/B 74A760205 WTR001 -060 602 25 A 74A760225 WTR001 -060 602 25 A 74A760225 WTR001 -060 603 26 B 74A760325 WTR001 -060 603 26 B 74A760325 WTR002 -060 602 25 A 74A760226 WTR002 -060 603 25 B 74A760325 WTR003 -050 603 26 B 74A760326 WTR003 -050 602 05 A/B 74A760326 WTR003 -050 602 05 A/B 74A760326 WTR003 -050 602 07 A/B 74A760205 WTR003 -050 602 07 A/B 74A760205 WTR004 -050 602 07 A/B 74A760207					
WTR001 -050 602 05 A/B 74A760205 WTR001 -050 602 07 A/B 74A760207 WTR001 -060 602 25 A 74A760226 WTR001 -060 603 25 B 74A760325 WTR001 -060 603 25 B 74A760325 WTR002 -060 603 25 A 74A760325 WTR002 -060 602 25 A 74A760325 WTR002 -060 603 25 B 74A760325 WTR002 -060 603 25 B 74A760325 WTR003 -050 603 25 B 74A760326 WTR003 -050 602 05 A/B 74A760205 WTR005 -050 602 07 A/B 74A760205 WTR005 -050 602 07 A/B 74A760200 WTR006 -050 602 07 A/B 74A760200 WTR007 -060 602 33 A/B 74A760205 <					
WTR001 -050 602 07 A/B 74A760207 WTR001 -060 602 25 A 74A760225 WTR001 -060 602 26 A 74A760225 WTR001 -060 603 25 B 74A760225 WTR002 -060 603 26 B 74A760225 WTR002 -060 602 25 A 74A760225 WTR002 -060 603 25 B 74A760225 WTR003 -050 602 05 A 74A760225 WTR003 -050 602 05 A/B 74A760225 WTR003 -050 602 07 A/B 74A760205 WTR003 -050 602 07 A/B 74A760207 WTR005 -050 602 07 A/B 74A760207 WTR006 -050 602 07 A/B 74A760207 WTR007 -060 602 33 A/B 74A760205 WTR007 -060 602 33 A/B 74A760233					
WTR001 -060 602 25 A 74A760225 WTR001 -060 602 26 A 74A760226 WTR001 -060 603 25 B 74A760325 WTR002 -060 603 25 B 74A760325 WTR002 -060 602 25 A 74A760225 WTR002 -060 603 25 B 74A760325 WTR003 -060 603 25 B 74A760326 WTR003 -050 602 05 A/B 74A760326 WTR003 -050 602 07 A/B 74A76025 WTR003 -050 602 07 A/B 74A760205 WTR005 -050 602 07 A/B 74A760207 WTR006 -050 602 07 A/B 74A760207 WTR006 -050 602 05 A/B 74A760205 WTR006 -050 602 05 A/B 74A760205 WTR007 -060 602 33 A/B 74A760233					
WTR001 -060 602 26 A 74A760226 WTR001 -060 603 25 B 74A760325 WTR002 -060 603 26 B 74A760326 WTR002 -060 602 25 A 74A760225 WTR002 -060 602 26 A 74A760225 WTR002 -060 603 26 B 74A760326 WTR003 -050 603 26 B 74A760326 WTR003 -050 602 05 A/B 74A760205 WTR003 -050 602 07 A/B 74A760205 WTR005 -050 602 07 A/B 74A760205 WTR006 -050 602 07 A/B 74A760207 WTR006 -050 602 05 A/B 74A760205 WTR007 -060 602 33 A/B 74A760205 WTR008 -060 602 25 A 74A760233 WTR008 -060 602 25 A 74A760225 <tr< td=""><td></td><td></td><td></td><td></td><td></td></tr<>					
WTR001 -060 603 25 B 74A760325 WTR002 -060 602 26 B 74A760226 WTR002 -060 602 25 A 74A760225 WTR002 -060 602 26 A 74A760226 WTR002 -060 603 25 B 74A760226 WTR003 -050 602 05 AB 74A760226 WTR003 -050 602 05 AB 74A760207 WTR003 -050 602 07 AB 74A760207 WTR005 -050 602 07 AB 74A760207 WTR006 -050 602 07 AB 74A760207 WTR006 -050 602 07 AB 74A760207 WTR006 -050 602 07 AB 74A760207 WTR007 -060 602 33 AB 74A760205 WTR007 -060 602 33 AB 74A760205 WTR008 -060 602 25 A 74A760225					
WTR001 -060 603 26 B 74A760326 WTR002 -060 602 25 A 74A760225 WTR002 -060 602 26 A 74A760226 WTR002 -060 603 25 B 74A760325 WTR003 -050 602 26 B 74A760205 WTR003 -050 602 07 A/B 74A760205 WTR005 -050 602 07 A/B 74A760207 WTR005 -050 602 07 A/B 74A760207 WTR005 -070 702 00 A/B 74A760207 WTR006 -050 602 07 A/B 74A760207 WTR006 -050 602 07 A/B 74A760205 WTR007 -060 602 33 A/B 74A760233 WTR007 -060 602 33 A/B 74A760233 WTR008 -060 602 25 A 74A760225 WTR008 -060 603 25 B 74A760225					
WTR002 -060 602 25 A 74A760225 WTR002 -060 602 26 A 74A760225 WTR002 -060 603 25 B 74A76025 WTR003 -050 602 26 B 74A76025 WTR003 -050 602 07 A/B 74A76020 WTR005 -050 602 07 A/B 74A76020 WTR005 -050 602 07 A/B 74A76020 WTR005 -070 702 00 A/B 74A770200 WTR006 -050 602 07 A/B 74A76025 WTR006 -050 602 07 A/B 74A760205 WTR007 -060 602 33 A/B 74A760205 WTR007 -070 702 00 A/B 74A760203 WTR008 -060 602 25 A 74A76023 WTR008 -060 602 25 A 74A760225 WTS001 -060 603 25 B 74A703025					
WTR002 -060 602 26 A 74A760226 WTR002 -060 603 25 B 74A760325 WTR003 -060 603 25 B 74A760325 WTR003 -050 602 05 A/B 74A760205 WTR003 -050 602 07 A/B 74A760207 WTR005 -050 602 07 A/B 74A760207 WTR005 -050 602 07 A/B 74A760207 WTR006 -050 602 05 A/B 74A760207 WTR006 -050 602 05 A/B 74A760205 WTR007 -060 602 33 A/B 74A760205 WTR007 -070 702 00 A/B 74A760205 WTR008 -060 602 25 A A 74A760225 WTR008 -060 602 25 A A 74A760225 WTR008 -060 603 25 B 74A760225 WTS001 -060 603 25 B					
WTR002 -060 603 25 B 74A760325 WTR002 -060 603 26 B 74A760325 WTR003 -050 602 05 A/B 74A760205 WTR003 -050 602 07 A/B 74A760207 WTR005 -050 602 07 A/B 74A760207 WTR006 -050 602 05 A/B 74A770200 WTR006 -050 602 07 A/B 74A760205 WTR007 -060 602 33 A/B 74A760205 WTR007 -060 602 33 A/B 74A760205 WTR008 -060 602 25 A 74A760233 WTR008 -060 603 25 B 74A760225 WTR008 -060 603 25 B 74A760325 WTS001 -060 603 25 B 74A760225 WTS001 -060 603 26 B 74A760226 WTS001 -060 603 26 B 74A760226 <					
WTR002 -060 603 26 B 74A760326 WTR003 -050 602 05 AJB 74A760205 WTR005 -050 602 07 AJB 74A760207 WTR005 -050 602 07 AJB 74A760207 WTR006 -050 602 05 AJB 74A770200 WTR006 -050 602 07 AJB 74A760205 WTR007 -060 602 33 AJB 74A760233 WTR007 -060 602 33 AJB 74A760233 WTR008 -060 602 25 A AJA4760233 WTR008 -060 603 25 B 74A760225 WTR008 -060 603 25 B 74A760225 WTR008 -070 702 00 AJB 74A760225 WTS001 -060 603 25 B 74A760226 WTS001 -060 603 26 B 74A760226 WTS002 -060 603 26 B 74A760226					
WTR003 -050 602 05 A/B 74A760205 WTR003 -050 602 07 A/B 74A760207 WTR005 -050 602 07 A/B 74A760207 WTR005 -050 602 07 A/B 74A760205 WTR006 -050 602 05 A/B 74A760205 WTR007 -060 602 33 A/B 74A760207 WTR007 -060 602 33 A/B 74A760207 WTR008 -060 602 25 A 74A760223 WTR008 -060 603 25 B 74A760225 WTR008 -060 603 25 B 74A760225 WTS001 -060 603 26 A 74A760226 WTS001 -060 603 26 B 74A760226 WTS001 -060 603 26 B 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 603 26 B 74A760226 <					
WTR003 -050 602 07 A/B 74A760207 WTR005 -050 602 07 A/B 74A760207 WTR005 -070 702 oo A/B 74A770200 WTR006 -050 602 05 A/B 74A760205 WTR006 -050 602 07 A/B 74A760205 WTR007 -060 602 33 A/B 74A760207 WTR008 -060 602 25 A A/B 74A760225 WTR008 -060 603 25 B 74A760225 WTR008 -060 603 25 B 74A760225 WTS001 -060 603 26 B 74A760226 WTS001 -060 603 26 B 74A760226 WTS001 -060 603 26 B 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 612 09 A/B 74A760226					
WTR005 -050 602 07 A/B 74A760207 WTR005 -070 702 oo A/B 74A770200 WTR006 -050 602 05 A/B 74A760205 WTR006 -050 602 07 A/B 74A760207 WTR007 -060 602 33 A/B 74A760233 WTR008 -060 602 25 A 74A760225 WTR008 -060 603 25 B 74A760225 WTR008 -070 702 oo A/B 74A760225 WTS001 -060 602 26 A 74A760226 WTS001 -060 603 26 B 74A760226 WTS001 -060 603 26 B 74A760226 WTS002 -060 602 26 A 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 603 26 B 74A760226 WTS003 -060 612 09 A/B 74A761209 <					
WTR005 -070 702 oo A/B 74A770200 WTR006 -050 602 05 A/B 74A760205 WTR006 -050 602 07 A/B 74A760205 WTR007 -060 602 33 A/B 74A760233 WTR007 -070 702 oo A/B 74A760233 WTR008 -060 602 25 A 74A760225 WTR008 -060 603 25 B 74A760225 WTR008 -070 702 oo A/B 74A760225 WTR008 -070 702 oo A/B 74A760225 WTS001 -060 603 26 B 74A760226 WTS001 -060 603 26 B 74A760226 WTS002 -060 602 26 A 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 612 09 A/B 74A760226 WTS003 -060 602 25 A 74A760225					
WTR006 -050 602 05 A/B 74A760205 WTR006 -050 602 07 A/B 74A760207 WTR007 -060 602 33 A/B 74A760233 WTR007 -070 702 00 A/B 74A760233 WTR008 -060 602 25 A 74A760225 WTR008 -060 603 25 B 74A760225 WTR008 -070 702 00 A/B 74A760225 WTR008 -060 603 25 B 74A760225 WTS001 -060 602 26 A 74A760226 WTS001 -060 603 26 B 74A760326 WTS002 -060 602 26 A 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 603 26 B 74A760226 WTS003 -060 612 09 A/B 74A760226 WTS003 -060 602 25 A 74A760225 <tr< td=""><td></td><td></td><td></td><td></td><td></td></tr<>					
WTR006 -050 602 07 A/B 74A760207 WTR007 -060 602 33 A/B 74A760233 WTR007 -070 702 00 A/B 74A770200 WTR008 -060 602 25 A 74A760225 WTR008 -060 603 25 B 74A760225 WTR008 -070 702 00 A/B 74A770200 WTS001 -060 602 26 A 74A760226 WTS001 -060 603 26 B 74A760226 WTS001 -060 603 26 B 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 612 09 A/B 74A760226 WTS003 -060 612 09 A/B 74A760226 WTS003 -060 602 25 A 74A760225 WTS003 -060 603 26 B 74A760226 <tr< td=""><td></td><td></td><td></td><td></td><td></td></tr<>					
WTR007 -060 602 33 A/B 74A760233 WTR007 -070 702 00 A/B 74A770200 WTR008 -060 602 25 A 74A760225 WTR008 -060 603 25 B 74A760325 WTR008 -070 702 00 A/B 74A70200 WTS001 -060 602 26 A 74A760226 WTS001 -060 603 26 B 74A760326 WTS001 -060 603 26 B 74A760326 WTS002 -060 602 26 A 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 603 26 B 74A760226 WTS003 -060 612 09 A/B 74A761209 WTS003 -060 602 25 A 74A760225 WTS003 -060 602 25 A 74A760225 WTS003 -060 603 25 B 74A760225					
WTR007 -070 702 oo A/B 74A770200 WTR008 -060 602 25 A 74A760225 WTR008 -060 603 25 B 74A760325 WTR008 -070 702 oo A/B 74A770200 WTS001 -060 602 26 A 74A760226 WTS001 -060 603 26 B 74A760226 WTS001 -070 702 oo A/B 74A760226 WTS002 -060 602 26 A 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 612 09 A/B 74A760226 WTS002 -060 612 09 A/B 74A770200 WTS003 -060 602 25 A 74A760225 WTS003 -060 603 25 B 74A760226 WTS003 -060 603 26 B 74A760326					
WTR008 -060 602 25 A 74A760225 WTR008 -060 603 25 B 74A760325 WTR008 -070 702 00 A/B 74A770200 WTS001 -060 602 26 A 74A760226 WTS001 -060 603 26 B 74A760326 WTS001 -070 702 00 A/B 74A760326 WTS002 -060 602 26 A 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 612 09 A/B 74A761209 WTS003 -060 602 25 A 74A760225 WTS003 -060 602 25 A 74A760225 WTS003 -060 603 25 B 74A760326 WTS003 -060 603 25 B 74A760326 WTS003 -060 612 14 A/B 74A761220					
WTR008 -060 603 25 B 74A760325 WTR008 -070 702 00 A/B 74A770200 WTS001 -060 602 26 A 74A760226 WTS001 -060 603 26 B 74A760326 WTS001 -070 702 00 A/B 74A770200 WTS002 -060 602 26 A 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 612 09 A/B 74A760226 WTS003 -060 602 25 A 74A760225 WTS003 -060 602 25 A 74A760225 WTS003 -060 603 25 B 74A760225 WTS003 -060 603 26 B 74A760325 WTS003 -060 612 14 A/B 74A761214 WTS003 -060 612 20 A/B 74A770101					
WTR008 -070 702 oo A/B 74A770200 WTS001 -060 602 26 A 74A760226 WTS001 -060 603 26 B 74A760326 WTS001 -070 702 oo A/B 74A760326 WTS002 -060 602 26 A 74A760226 WTS002 -060 603 26 B 74A760326 WTS002 -060 612 09 A/B 74A760326 WTS002 -060 612 09 A/B 74A760226 WTS003 -060 602 25 A 74A760225 WTS003 -060 602 26 A 74A760225 WTS003 -060 603 25 B 74A760325 WTS003 -060 603 26 B 74A760326 WTS003 -060 612 14 A/B 74A761214 WTS003 -060 612 20 A/B 74A77012 WTS003 -070 701 01 A/B 74A770102 <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
WTS001 -060 602 26 A 74A760226 WTS001 -060 603 26 B 74A760326 WTS001 -070 702 00 A/B 74A770200 WTS002 -060 602 26 A 74A760226 WTS002 -060 603 26 B 74A760226 WTS002 -060 612 09 A/B 74A761209 WTS002 -070 702 00 A/B 74A770200 WTS003 -060 602 25 A 74A760225 WTS003 -060 603 25 B 74A760226 WTS003 -060 603 26 B 74A760325 WTS003 -060 603 26 B 74A760326 WTS003 -060 612 14 A/B 74A761214 WTS003 -060 612 20 A/B 74A761220 WTS003 -070 701 01 A/B 74A770101 WTS003 -070 701 02 A/B 74A770102 <					
WTS001 -060 603 26 B 74A760326 WTS001 -070 702 00 A/B 74A770200 WTS002 -060 602 26 A 74A760226 WTS002 -060 603 26 B 74A760326 WTS002 -060 612 09 A/B 74A761209 WTS002 -070 702 00 A/B 74A770200 WTS003 -060 602 25 A 74A760225 WTS003 -060 603 25 B 74A760325 WTS003 -060 603 26 B 74A760325 WTS003 -060 603 26 B 74A760325 WTS003 -060 612 14 A/B 74A760326 WTS003 -060 612 20 A/B 74A761214 WTS003 -070 701 01 A/B 74A770101 WTS003 -070 701 02 A/B 74A770102 WTS004 -060 602 26 A 74A760226 <				· ·	
WTS001 -070 702 oo A/B 74A770200 WTS002 -060 602 26 A 74A760226 WTS002 -060 603 26 B 74A760326 WTS002 -060 612 09 A/B 74A761209 WTS003 -060 602 25 A 74A760225 WTS003 -060 602 26 A 74A760226 WTS003 -060 603 25 B 74A760325 WTS003 -060 603 26 B 74A760326 WTS003 -060 612 14 A/B 74A761214 WTS003 -060 612 20 A/B 74A761220 WTS003 -070 701 01 A/B 74A770101 WTS003 -070 701 02 A/B 74A770102 WTS004 -060 602 26 A A 74A760226 WTS004 -060 603 26 B 74A760226 WTS004 -060 603 26 B 74A760225					
WTS002 -060 602 26 A 74A760226 WTS002 -060 603 26 B 74A760326 WTS002 -060 612 09 A/B 74A761209 WTS002 -070 702 00 A/B 74A770200 WTS003 -060 602 25 A 74A760225 WTS003 -060 603 25 B 74A760226 WTS003 -060 603 26 B 74A760325 WTS003 -060 612 14 A/B 74A761214 WTS003 -060 612 20 A/B 74A761220 WTS003 -070 701 01 A/B 74A70101 WTS003 -070 701 02 A/B 74A770102 WTS004 -060 602 26 A 74A760226 WTS004 -060 603 26 B 74A760226 WTS004 -060 603 26 B 74A760226 WTS004 -060 603 26 B 74A760226					
WTS002 -060 603 26 B 74A760326 WTS002 -060 612 09 A/B 74A761209 WTS002 -070 702 00 A/B 74A770200 WTS003 -060 602 25 A 74A760225 WTS003 -060 603 25 B 74A760226 WTS003 -060 603 26 B 74A760326 WTS003 -060 612 14 A/B 74A761214 WTS003 -060 612 20 A/B 74A761220 WTS003 -070 701 01 A/B 74A770101 WTS003 -070 701 02 A/B 74A770102 WTS004 -060 602 26 A 74A760226 WTS004 -060 603 26 B 74A760226 WTS004 -060 603 26 B 74A760226 WTS005 -060 602 25 A 74A760225					
WTS002 -060 612 09 A/B 74A761209 WTS002 -070 702 00 A/B 74A760200 WTS003 -060 602 25 A 74A760225 WTS003 -060 602 26 A 74A760226 WTS003 -060 603 25 B 74A760325 WTS003 -060 603 26 B 74A760326 WTS003 -060 612 14 A/B 74A761214 WTS003 -060 612 20 A/B 74A761220 WTS003 -070 701 01 A/B 74A770101 WTS003 -070 701 02 A/B 74A770102 WTS004 -060 602 26 A 74A760226 WTS004 -060 603 26 B 74A760226 WTS005 -060 602 25 A 74A760225	WTS002	-060	602 26	A	74A760226
WTS002 -070 702 00 A/B 74A770200 WTS003 -060 602 25 A 74A760225 WTS003 -060 602 26 A 74A760226 WTS003 -060 603 25 B 74A760325 WTS003 -060 603 26 B 74A760326 WTS003 -060 612 14 A/B 74A761214 WTS003 -060 612 20 A/B 74A761220 WTS003 -070 701 01 A/B 74A770101 WTS003 -070 701 02 A/B 74A770102 WTS004 -060 602 26 A 74A760226 WTS004 -060 603 26 B 74A760226 WTS004 -070 702 00 A/B 74A70200 WTS005 -060 602 25 A 74A760225			603 26	В	74A760326
WTS003 -060 602 25 A 74A760225 WTS003 -060 602 26 A 74A760226 WTS003 -060 603 25 B 74A760325 WTS003 -060 603 26 B 74A760326 WTS003 -060 612 14 A/B 74A761214 WTS003 -060 612 20 A/B 74A761220 WTS003 -070 701 01 A/B 74A770101 WTS003 -070 701 02 A/B 74A770102 WTS004 -060 602 26 A 74A760226 WTS004 -060 603 26 B 74A760326 WTS005 -060 602 25 A 74A760225	WTS002	-060		A/B	74A761209
WTS003 -060 602 26 A 74A760226 WTS003 -060 603 25 B 74A760325 WTS003 -060 603 26 B 74A760326 WTS003 -060 612 14 A/B 74A761214 WTS003 -060 612 20 A/B 74A761220 WTS003 -070 701 01 A/B 74A770101 WTS003 -070 701 02 A/B 74A770102 WTS004 -060 602 26 A 74A760226 WTS004 -060 603 26 B 74A760326 WTS004 -070 702 00 A/B 74A70200 WTS005 -060 602 25 A 74A760225					
WTS003 -060 603 25 B 74A760325 WTS003 -060 603 26 B 74A760326 WTS003 -060 612 14 A/B 74A761214 WTS003 -060 612 20 A/B 74A761220 WTS003 -070 701 01 A/B 74A770101 WTS003 -070 701 02 A/B 74A770102 WTS004 -060 602 26 A 74A760226 WTS004 -060 603 26 B 74A760326 WTS004 -070 702 00 A/B 74A770200 WTS005 -060 602 25 A 74A760225				A	74A760225
WTS003 -060 603 26 B 74A760326 WTS003 -060 612 14 A/B 74A761214 WTS003 -060 612 20 A/B 74A761220 WTS003 -070 701 01 A/B 74A770101 WTS003 -070 701 02 A/B 74A770102 WTS004 -060 602 26 A 74A760226 WTS004 -060 603 26 B 74A760326 WTS004 -070 702 00 A/B 74A770200 WTS005 -060 602 25 A 74A760225	WTS003	-060	602 26		74A760226
WTS003 -060 612 14 A/B 74A761214 WTS003 -060 612 20 A/B 74A761220 WTS003 -070 701 01 A/B 74A770101 WTS003 -070 701 02 A/B 74A770102 WTS004 -060 602 26 A 74A760226 WTS004 -060 603 26 B 74A760326 WTS004 -070 702 00 A/B 74A770200 WTS005 -060 602 25 A 74A760225	WTS003	-060	603 25	В	74A760325
WTS003 -060 612 20 A/B 74A761220 WTS003 -070 701 01 A/B 74A770101 WTS003 -070 701 02 A/B 74A770102 WTS004 -060 602 26 A 74A760226 WTS004 -060 603 26 B 74A760326 WTS004 -070 702 00 A/B 74A770200 WTS005 -060 602 25 A 74A760225	WTS003	-060	603 26	В	74A760326
WTS003 -070 701 01 A/B 74A770101 WTS003 -070 701 02 A/B 74A770102 WTS004 -060 602 26 A 74A760226 WTS004 -060 603 26 B 74A760326 WTS004 -070 702 00 A/B 74A770200 WTS005 -060 602 25 A 74A760225	WTS003	-060	612 14	A/B	74A761214
WTS003 -070 701 02 A/B 74A770102 WTS004 -060 602 26 A 74A760226 WTS004 -060 603 26 B 74A760326 WTS004 -070 702 00 A/B 74A770200 WTS005 -060 602 25 A 74A760225	WTS003	-060	612 20	A/B	74A761220
WTS004 -060 602 26 A 74A760226 WTS004 -060 603 26 B 74A760326 WTS004 -070 702 00 A/B 74A770200 WTS005 -060 602 25 A 74A760225	WTS003	-070		A/B	74A770101
WTS004 -060 603 26 B 74A760326 WTS004 -070 702 00 A/B 74A770200 WTS005 -060 602 25 A 74A760225	WTS003	-070	701 02	A/B	74A770102
WTS004 -070 702 00 A/B 74A770200 WTS005 -060 602 25 A 74A760225	WTS004	-060	602 26	A	74A760226
WTS005 -060 602 25 A 74A760225	WTS004	-060	603 26	В	74A760326
	WTS004	-070	702 00	A/B	74A770200
WTS005 -060 602.26 A 74A760226	WTS005	-060	602 25	A	74A760225
711700220	WTS005	-060	602 26	A	74A760226
WTS005 -060 603 25 B 74A760325	WTS005	-060	603 25	В	74A760325
WTS005 -060 603 26 B 74A760326					
WTS005 -060 612 21 A/B 74A761221					
WTS006 -060 602 25 A 74A760225					

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
WTS006	-060	603 25	В	74A760325
WTS006	-070	702 oo	A/B	74A770200
WTT001	-060	602 25	A	74A760225
WTT001	-060	603 25	В	74A760325
WTT001	-060	612 02	A/B	74A761202
WTT002	-060	602 25	A	74A760225
WTT002	-060	603 25	В	74A760325
WTT002	-070	702 oo	A/B	74A770200
WTT003	-060	602 25	A	74A760225
WTT003	-060	603 25	В	74A760325
WTT003	-070	702 00	A/B	74A770200
WTT004	-060	602 25	A	74A760225
WTT004	-060	602 26	A	74A760226
WTT004	-060	603 25	В	74A760325
WTT004	-060	603 26	В	74A760326
WTT005	-060	602 25	A	74A760225
WTT005	-060	603 25	B	74A760325
WTT005	-070	702 00	A/B	74A700323 74A770200
WTT006	-070	602 25	A/B A	74A770200 74A760225
WTT006	-060 -060	603 25	A B	74A760225 74A760325
WTU001	-060	542 02	A/B	74A760323 74A754202
WTU001				
	-040	542 03	A/B	74A754203
WTU001	-040	542 08	A/B	74A754208
WTU001	-070	701 23	A/B	74A770123
WTU002	-040	542 05	A/B	74A754205
WTU002	-040	542 07	A/B	74A754207
WTU002	-040	542 09	A/B	74A754209
WTU002	-040	542 10	A/B	74A754210
WTU002	-040	542 15	A/B	74A754215
WTU002	-040	552 05	A	74A755205
WTU004	-040	542 09	A/B	74A754209
WTU004	-070	701 33	A/B	74A770133
WTU005	-040	542 01	A/B	74A754201
WTU005	-040	542 03	A/B	74A754203
WTU005	-040	542 04	A/B	74A754204
WTU005	-040	542 06	A/B	74A754206
WTU005	-070	701 25	A/B	74A770125
WTU006	-040	542 15	A/B	74A754215
WTU006	-070	701 05	A/B	74A770105
WTU007	-040	542 02	A/B	74A754202
WTU007	-070	701 32	A/B	74A770132
WTU008	-040	542 07	A/B	74A754207
WTU008	-070	701 66	A/B	74A770166
WTV001	-040	552 02	A/B	74A755202
WTV001	-040	552 03	A/B	74A755203
WTV001	-040	552 08	A/B	74A755208
WTV001	-070	701 24	A/B	74A770124
WTV002	-040	552 05	A/B	74A755205
WTV002	-040	552 07	A/B	74A755207
WTV002	-040	552 09	A/B	74A755209
WTV002	-040	552 10	A/B	74A755210
WTV002	-040	552 15	A/B	74A755215
WTV005	-040	552 01	A/B	74A755201
WTV005	-040	552 03	A/B	74A755203
WTV005	-040	552 04	A/B	74A755204
WTV005	-040	552 06	A/B	74A755206
WTV005	-070	701 26	A/B	74A770126
WTV006	-040	552 15	A/B	74A755215
	0.0	1 2210		

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
WTV006	-070	701 04	A/B	74A770104
WTV007	-040	552 07	A/B	74A755207
WTV007	-070	701 67	A/B	74A770167
WTW001	-070	701 47	A/B	68A770147
WTW001	-070	701 57	A/B	74A770157
WTW001	-070	701 83	A/B	68A770183
WTW002	-070	701 47	A/B	68A770147
WTW003	-070	701 47	A/B	68A770147
WTW003	-070	701 83	A/B	68A770183
WTY001	-070	701 41	A/B/A/B	74A770141
WTY001	-070	701 42	A/B/A/B	74A770142
WTY001	-070	701 44	A/B/A/B	74A770144
WTY001	-070	701 81	A/B	74A770181
WTY001	-070	701 82	A/B	74A770182
WTY001	-070	701 85	A/B	74A770185
WTY001	-070	703 00	A/B	68A770300
WTY001	-070	703 01	A/B	68A770301
WTY001	-070	703 02	A/B	68A770302
WTY001	-070	703 03	A/B	68A770303
WTY002	-070	701 43	A/B/A/B	74A770143
WTY002	-070	701 50	A/B/A/B	74A770150
WTY002	-070	701 51	A/B/A/B	74A770151
WTY002	-070	701 86	A/B	74A770186
1A-A135	-020	522 12	A/B	74A752212
1A-A135	-030	532 38	A/B	74A753238
1A-A138	-070	700 57	A/B	74A770057
1A-C023	-020	532 09	A/B	74A753209
1A-D024	-020	532 08	A/B	74A753208
1A-J084	-070	700 14	A/B	74A770014
1A-P001	-060	602 22	A/B	74A760222
1A-R002	-060	602 21	A/B	74A760221
1CBA073	-070	700 57	A/B	74A770057
1CBA074	-070	700 57	A/B	74A770057
1CBC025	-070	700 42	A	74A770042
1CBC025	-070	705 42	В	74A770542
1CBC027	-070	700 42	A	74A770042
1CBC027	-070	705 42	В	74A770542
1CBC028	-070	700 42	A	74A770042
1CBC028	-070	705 42	В	74A770542
1CBC029	-070	700 42	A	74A770042
1CBC029	-070	705 42	В	74A770542
1CBC038	-070	700 42	A	74A770042
1CBC038	-070	705 42	В	74A770542
1CBC039	-070	700 42	A	74A770042
1CBC039	-070	705 42	В	74A770542
1CBC048	-070	700 05	A	74A770005
1CBC048	-070	705 05	В	74A770505
1CBC073	-070	700 42	A	74A770042
1CBC073	-070	705 42	В	74A770542
1CBC075	-070	700 42	A	74A770042
1CBC075	-070	705 42	В	74A770542
1CBC085	-070	700 42	A	74A770042
1CBC085	-070	705 42	В	74A770542
1CBC086	-070	700 42	A	74A770042
1CBC086	-070	705 42	В	74A770542
1CBC087	-070	700 42	A	74A770042
1CBC087 1CBC088	-070 -070	705 42 700 42	B A	74A770542 74A770042

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
1CBC088	-070	705 42	В	74A770542
1CBC136	-070	700 42	A	74A770042
1CBC136	-070	705 42	В	74A770542
1CBC139	-070	700 42	A	74A770042
1CBC139	-070	705 42	В	74A770542
1CBC147	-070	700 42	A	74A770042
1CBC147	-070	705 42	В	74A770542
1CBD030	-070	700 02	A/B	74A770002
1CBD031	-070	700 02	A/B	74A770002
1CBD032	-070	700 02	A/B	74A770002
1CBD037	-070	700 02	A/B	74A770002
1CBD045	-070	700 02	A/B	74A770002
1CBD074	-070	700 02	A/B	74A770002
1CBD074	-070	700 04	A/B	74A770004
1CBD132	-070	700 02	A/B	74A770004
1CBD132	-070	700 02	A/B A/B	74A770002 74A770002
1CBD133	-070	700 02	A/B A/B	74A770002 74A770002
1CRD124	-070	700 44	A/B	74A770044
1J-A138	-070	700 57	A/B	74A770057
1J-A153	-030	532 38	A/B	74A753238
1J-A153	-070	943 38	A/B	74R794338
1J-C021	-030	532 26	A/B	74A753226
1J-G089	-020	532 11	A	74A753211
1J-G089	-030	533 11	В	74A753311
1J-H004	-070	700 15	A/B	74A770015
1J-J084	-070	700 14	A/B	74A770014
1K-A130	-070	700 57	A/B	74A770057
1K-C007	-020	532 07	A/B	74A753207
1K-C007	-020	532 17	A	74A753217
1K-C007	-030	532 25	A/B	74A753225
1K-C007	-030	533 17	В	74A753317
1K-C007	-060	602 22	A/B	74A760222
1K-C007	-070	943 40	A/B	74R794340
1K-C022	-020	532 07	A/B	74A753207
1K-C022	-030	532 26	A/B	74A753226
1K-C022	-030	532 28	A/B	74A753228
1K-C042	-070	700 42	A	74A770042
1K-C042	-070	705 42	В	74A770542
1K-C055	-070	700 05	A	74A770005
1K-C055	-070	705 05	B	74A770505
1K-C058	-070	700 05	A	74A770005
1K-C058	-070	705 05	В	74A770505
1K-C060	-070	700 05	A	74A770005
1K-C060	-070	705 05	В	74A770505
1K-C076	-070	700 05	A	74A770005
1K-C076	-070	705 05	В	74A770505
1K-C079	-070	700 42	A	74A770042
1K-C079	-070	705 42	В	74A770542
1K-C080	-070	700 42	A	74A770042
1K-C080	-070	705 42	В	74A770542
1K-C083	-070	700 05	A	74A770005
1K-C083	-070	705 05	В	74A770505
1K-C094	-070	700 42	A	74A770042
1K-C094	-070	705 42	В	74A770542
1K-C096	-070	700 05	A	74A770005
1K-C096	-070	705 05	В	74A770505
1K-C097	-070	700 42	A	74A770042
	570	700 74	4.3	1 12 1 1 1 0 0 7 4

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
1K-C099	-070	700 05	A	74A770005
1K-C099	-070	705 05	В	74A770505
1K-C100	-070	700 05	A	74A770005
1K-C100	-070	705 05	В	74A770505
1K-C101	-070	700 05	A	74A770005
1K-C101	-070	705 05	В	74A770505
1K-C102	-070	700 05	A	74A770005
1K-C102	-070	705 05	В	74A770505
1K-C103	-070	700 05	A	74A770005
1K-C103	-070	705 05	В	74A770505
1K-C106	-070	700 05	A	74A770005
1K-C106	-070	705 05	В	74A770505
1K-C111	-070	700 42	A	74A770042
1K-C111	-070	705 42	В	74A770542
1K-C112	-070	700 05	A	74A770005
1K-C112	-070	705 05	В	74A770505
1K-C127	-070	700 05	A	74A770005
1K-C127	-070	705 05	В	74A770505
1K-C128	-070	700 42	A	74A770042
1K-C128	-070	705 42	В	74A770542
1K-C129	-070	700 42	A	74A770042
1K-C129 1K-C129	-070	705 42	B	74A770042 74A770542
1K-C129 1K-C140	-070	700 05		
1K-C140 1K-C140			A	74A770005 74A770505
	-070	705 05	В	
1K-C143	-070	700 50	A/B	74A770050
1K-C145	-030	532 28	A/B	74A753228
1K-C145	-030	532 29	A/B	74A753229
1K-C145	-030	532 43	A/B	74A753243
1K-C154	-070	700 05	A	74A770005
1K-C154	-070	705 05	В	74A770505
1K-C156	-070	700 05	A	74A770005
1K-C156	-070	705 05	В	74A770505
1K-D008	-020	532 16	A	74A753216
1K-D008	-030	532 27	A/B	74A753227
1K-D008	-030	532 29	A/B	74A753229
1K-D008	-030	532 43	A/B	74A753243
1K-D008	-030	533 16	В	74A753316
1K-D008	-060	602 21	A/B	74A760221
1K-D104	-070	700 02	A/B	74A770002
1K-D104	-070	700 04	A/B	74A770004
1K-D104	-070	705 04	В	74A770504
1K-D105	-070	700 02	A/B	74A770002
1K-D105	-070	700 04	A/B	74A770004
1K-D105	-070	705 04	В	74A770504
1K-D142	-070	700 04	A/B	74A770004
1K-D142	-070	705 04	В	74A770504
1K-D144	-070	700 04	A/B	74A770004
1K-D144	-070	705 04	В	74A770504
1K-D146	-030	532 25	A/B	74A753225
1K-D146	-030	532 27	A/B	74A753227
1K-D146	-070	943 40	A/B	74R794340
1K-F043	-070	700 06	A	74A770006
1K-F043	-070	705 06	В	74A770506
1K-F053	-070	700 06	A	74A770006
1K-F053	-070	705 06	В	74A770506
1K-F053	-070	700 06	A	74A770006
1K-F054	-070	705 06	В	74A770506
1K-F054 1K-F056	-070	700 06		74A770006
1 V -L030	-0/0	/00 00	A	/4A / /UUU0

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
1K-F056	-070	705 06	В	74A770506
1K-F057	-070	700 06	A	74A770006
1K-F057	-070	705 06	В	74A770506
1K-F059	-070	700 06	A	74A770006
1K-F059	-070	705 06	В	74A770506
1K-F063	-070	700 06	A	74A770006
1K-F063	-070	705 06	В	74A770506
1K-F066	-070	700 06	A	74A770006
1K-F066	-070	705 06	В	74A770506
1K-F077	-070	700 06	A	74A770006
1K-F077	-070	705 06	В	74A770506
1K-F078	-070	700 06	A	74A770006
1K-F078	-070	705 06	В	74A770506
1K-F081	-070	700 06	A	74A770006
1K-F081	-070	705 06	B	74A770506
		700 06		
1K-F082	-070		A	74A770006
1K-F082	-070	705 06	В	74A770506
1K-F122	-070	700 06	A	74A770006
1K-F122	-070	705 06	В	74A770506
1P-A019	-030	532 26	A/B	74A753226
1P-A019	-070	943 34	A/B	74R794334
1P-A135	-020	532 16	A	74A753216
1P-A135	-030	533 16	В	74A753316
1P-A135	-070	943 57	A	74R794357
1P-A138	-030	532 38	A/B	74A753238
1P-A138	-070	943 38	A/B	74R794338
1P-A153	-020	522 12	A/B	74A752212
1P-C005	-020	532 17	A	74A753217
1P-C005	-030	533 17	В	74A753317
1P-C007	-020	532 17	A	74A753217
1P-C007	-030	533 17	В	74A753317
1P-C019	-030	532 26	A/B	74A753226
1P-C019	-070	943 34	A/B	74R794334
1P-C022	-020	532 11	A	74A753211
1P-C022	-030	533 11	В	74A753311
1P-C023	-020	532 11	A	74A753211
1P-C023	-030	533 11	В	74A753311
1P-C072	-020	532 05	A/B	74A753205
1P-C072 1P-C072	-020	532 03		74A753203 74A753211
			A	
1P-C072	-030	533 11	В	74A753311
1P-C072A	-020	532 11	A	74A753211
1P-C072A	-030	533 11	В	74A753311
1P-C072B	-020	532 05	A/B	74A753205
1P-C145	-020	532 11	A	74A753211
1P-C145	-030	533 11	В	74A753311
1P-C145	-070	943 39	A/B	74R794339
1P-D006	-020	532 16	A	74A753216
1P-D006	-030	533 16	В	74A753316
1P-D008	-020	532 16	A	74A753216
1P-D008	-030	533 16	В	74A753316
1P-D024	-020	532 12	A	74A753212
1P-D024	-030	533 12	В	74A753312
1P-D035	-020	532 10	A/B	74A753210
1P-D035A	-020	532 12	A	74A753212
1P-D035A	-030	533 12	В	74A753312
1P-D035B	-020	532 10	A/B	74A753210
1P-D146	-020	532 10	A	74A753210
2110	-030	533 12	В	74A753312

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
1P-D146	-070	943 40	A/B	74R794340
1P-D155	-020	532 12	A	74A753212
1P-D155	-030	533 12	В	74A753312
1P-H004	-010	502 01	A	74A750201
1P-H004	-010	503 01	В	74A750301
1P-J084	-010	502 02	A	74A750202
1P-J084	-010	503 02	В	74A750302
1P-J137	-010	502 02	A	74A750202
1P-J137	-010	503 02	В	74A750302
1P-J137	-070	943 58	A/B	74R794358
1P-P001	-050	602 19	A/B	74A760219
1P-R002	-050	602 13	A/B	74A760213
1S-G160	-020	532 11	A	74A753211
1S-G160	-030	533 11	В	74A753311
1S-H020	-070	700 15	A/B	74A770015
1S-H049	-070	700 15	A/B A/B	74A770015
1S-H050	-070	700 15	A/B A/B	74A770015
		700 15		
1S-H051	-070		A/B	74A770015
1S-H052	-070	700 15	A/B	74A770015
1S-H141	-010	502 01	A	74A750201
1S-H141	-010	503 01	В	74A750301
1S-J017	-070	700 14	A/B	74A770014
1S-J018	-070	700 14	A/B	74A770014
1S-J036	-070	700 14	A/B	74A770014
1T-D046	-020	532 12	A	74A753212
1T-D046	-030	533 12	В	74A753312
1TBH090	-070	700 15	A/B	74A770015
1X-C009	-030	532 25	A/B	74A753225
1X-C009	-030	532 27	A/B	74A753227
1X-C107	-020	532 05	A/B	74A753205
1X-C107	-020	532 09	A/B	74A753209
1X-C107	-030	532 38	A/B	74A753238
1X-D010	-030	532 28	A/B	74A753228
1X-D010	-030	532 29	A/B	74A753229
1X-D026	-020	532 08	A/B	74A753208
1X-D026	-070	700 44	A/B	74A770044
1X-D108	-020	532 10	A/B	74A753210
1X-D108	-030	532 23	A/B	74A753223
1X-D108	-030	532 36	A/B A/B	74A753223
1X-E123	-020	532 09	A/B A/B	74A753230 74A753209
			A/B A/B	
1X-E123	-070	700 44		74A770044
10CBC016	-070	700 42	A	74A770042
10CBC016	-070	705 42	В	74A770542
10CBD001	-070	700 02	A/B	74A770002
10CBD002	-070	700 02	A/B	74A770002
10P-F015	-020	532 12	A	74A753212
10P-F015	-030	533 12	В	74A753312
10P-G009	-020	532 06	A	74A753206
10P-G009	-030	533 06	В	74A753306
10P-G017	-020	532 06	A	74A753206
10P-G017	-030	533 06	В	74A753306
10P-J005	-010	502 02	A	74A750202
10P-J005	-010	503 02	В	74A750302
10P-L018	-010	503 02	В	74A750302
10P-P003	-060	602 32	A/B	74A760232
10P-P006A	-060	602 32	A/B	74A760232
10P-P006B	-060	602 32	A/B	74A760232
10P-P008	-050	602 05	A/B	74A760205

REFERENCE	A1-F18AC-WRM	WORK PACKAGE		ASSEMBLY
DESIGNATION	(VOLUME NUMBER)	NUMBER	MODEL	IDENTIFICATION
10P-P010	-060	602 32	A/B	74A760232
10P-R004	-060	602 34	A/B	74A760234
10P-R007A	-060	602 34	A/B	74A760234
10P-R007B	-060	602 34	A/B	74A760234
10P-R011	-060	602 34	A/B	74A760234
10P-R012	-060	602 34	A/B	74A760234
10S-H014	-070	700 25	A/B	74A770025
12CBD002	-070	700 02	A/B	74A770002
12CBD002	-070	700 04	A/B	74A770004
12CBD002	-070	705 04	В	74A770504
12CBD028	-070	700 10	A/B	74A770010
12CBD070	-070	700 10	A/B	74A770010
12CBD071	-070	700 10	A/B	74A770010
12CBH003	-010	502 01	A	74A750201
12CBH003	-010	502 13	A/B	74A750213
12CBH003	-010	503 01	В	74A750301
12CBJ001	-010	502 02	A	74A750202
12CBJ001	-010	502 12	A/B	74A750212
12CBJ001	-010	503 02	В	74A750302
12J-G029	-020	532 12	A	74A753212
12J-G029	-020	532 16	A	74A753216
12J-G029	-030	533 12	В	74A753312
12J-G029	-030	533 16	В	74A753316
12J-G060	-020	532 13	A/B	74A753213
12J-G061	-020	532 13	A/B	74A753213
12K-C065	-070	705 05	В	74A770505
12K-C066	-070	705 05	В	74A770505
12K-C067	-070	705 05	В	74A770505
12K-C068	-070	705 05	В	74A770505
12K-C069	-070	705 05	В	74A770505
12K-E012	-070	700 07	A	74A770007
12K-E012	-070	705 07	В	74A770507
12K-E017	-070	700 07	A	74A770007
12K-E017	-070	705 07	В	74A770507
12K-E017 12K-E018	-070	700 07	A	74A770007
12K-E018	-070	705 07	В	74A770507
	-070	700 04		
12K-E020 12K-E020	-070	700 04	A	74A770004 74A770007
	-070	705 04	A B	
12K-E020				74A770504
12K-E020	-070	705 07	В	74A770507
12K-E022	-070	700 07	A	74A770007
12K-E022	-070	705 07	В	74A770507
12K-E043	-070	700 07 705 07	A	74A770007
12K-E043	-070	705 07	В	74A770507
12K-E093	-070	705 07	В	74A770507
12K-F013	-070	700 06	A	74A770006
12K-F013	-070	705 06	В	74A770506
12K-F014	-070	700 06	A	74A770006
12K-F014	-070	705 06	В	74A770506
12K-F015	-070	700 06	A	74A770006
12K-F015	-070	705 06	В	74A770506
12K-F016	-070	700 06	A	74A770006
12K-F016	-070	705 06	В	74A770506
12K-F019	-070	700 06	A	74A770006
12K-F019	-070	705 06	В	74A770506
12K-F023	-070	700 06	A	74A770006
12K-F023	-070	705 06	В	74A770506
12K-F024	-070	700 06	A	74A770006

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
12K-F024	-070	705 06	В	74A770506
12K-F025	-070	700 06	A	74A770006
12K-F025	-070	705 06	В	74A770506
12K-F027	-070	700 06	A	74A770006
12K-F027	-070	705 06	В	74A770506
12K-F042	-070	700 06	A	74A770006
12K-F042	-070	705 06	В	74A770506
12K-F044	-070	700 06	A	74A770006
12K-F044	-070	705 06	В	74A770506
12K-F062	-070	700 06	A	74A770006
12K-F062	-070	705 06	В	74A770506
12P-A004A	-020	532 16	A	74A753216
12P-A004A	-030	533 16	В	74A753316
12P-A004A	-070	943 35	A/B	74R794335
12P-D004A	-020	532 12	A/B A	74A753212
			B B	
12P-D004A	-030	533 12		74A753312
12P-D004A	-070	943 35	A/B	74R794335
12P-G005	-020	532 06	A	74A753206
12P-G005	-030	533 06	В	74A753306
12P-G007	-020	532 06	A	74A753206
12P-G007	-030	533 06	В	74A753306
12P-G029	-070	701 12	A/B	74A770112
12P-G060	-070	701 14	A/B	74A770114
12P-G061	-070	701 13	A/B	74A770113
12P-H008	-010	502 01	A	74A750201
12P-H008	-010	503 01	В	74A750301
12P-R006	-060	602 33	A/B	74A760233
12S-G046	-070	701 12	A/B	74A770112
12S-G049	-070	701 13	A/B	74A770113
12S-G051	-070	701 11	A/B	74A770111
12S-G057	-070	701 14	A/B	74A770114
12S-H009	-070	700 13	A/B	74A770013
12S-H010	-070	700 31	A/B	74A770031
12S-H011	-070	700 31	A/B	74A770031
12S-P048	-070	701 15	A/B	74A770115
12S-P055	-070	701 13	A/B A/B	74A770200
12S-P059	-070	701 16	A/B A/B	74A770200 74A770116
	-070	701 16		
12S-P091			A/B	74A770155
12S-R047	-070	701 17	A/B	74A770117
12S-R053	-070	702 00	A/B	74A770200
12S-R058	-070	701 18	A/B	74A770118
12S-R092	-070	701 56	A/B	74A770156
12TBC084	-070	700 05	A	74A770005
12TBC084	-070	705 05	В	74A770505
13CBC001	-070	700 05	A	74A770005
13CBC001	-070	705 05	В	74A770505
13K-D009	-070	700 04	A/B	74A770004
13K-D009	-070	705 04	В	74A770504
13P-D003	-020	532 16	A	74A753216
13P-D003	-030	533 16	В	74A753316
13P-G008	-020	532 06	A	74A753206
13P-G008	-030	533 06	В	74A753306
13P-P004	-050	602 05	A/B	74A760205
13P-P006	-040	562 01	A/B	74A756201
13P-R005	-040	562 02	A/B A/B	74A756202
13S-H002	-040	700 13	A/B A/B	74A730202 74A770013
15CBC001	-070 -070	700 13	A/B A	74A770013 74A770005
	-U/U	100 03	A	/4A / /0003

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
15J-K006	-010	502 01	A	74A750201
15J-K006	-010	503 01	В	74A750301
15J-K007	-010	502 01	A	74A750201
15J-K007	-010	503 01	В	74A750301
15P-E003A	-030	532 21	A/B	74A753221
15P-E003B	-030	532 21	A/B	74A753221
15P-E006	-030	532 21	A/B	74A753221
15P-E007	-030	532 21	A/B	74A753221
15P-H002	-010	502 01	A	74A750201
15P-H002	-010	503 01	В	74A750301
15P-K010	-010	503 01	В	74A750301
15S-H004	-070	700 27	A/B	74A770027
161K-C141	-070	700 05	A	74A770005
17CBC002	-070	700 05	A	74A770005
17CBC002	-070	705 05	В	74A770505
17CBC002	-070	700 05	A	74A770005
17CBC003 17CBC003	-070	705 05	B	74A770003 74A770505
17CBC004	-070	700 05	A	74A770005
17CBC004	-070	705 05	В	74A770505
17CBC021	-070	700 05	A	74A770005
17CBC021	-070	705 05	В	74A770505
17CBD001	-070	700 02	A/B	74A770002
17CBD001	-070	700 04	A/B	74A770004
17CBD001	-070	705 04	В	74A770504
17CBD005	-070	700 02	A/B	74A770002
17CBD006	-070	700 02	A/B	74A770002
17CBD007	-070	700 02	A/B	74A770002
17J-J008	-010	502 02	A	74A750202
17J-J008	-010	503 02	В	74A750302
17J-U017	-040	542 01	A/B	74A754201
17J-V018	-040	552 01	A/B	74A755201
17K-C009	-070	700 05	A	74A770005
17K-C009	-070	705 05	В	74A770505
17K-C010	-070	700 05	A	74A770005
17K-C010	-070	705 05	В	74A770505
17K-C019	-070	700 05	A	74A770005
17K-C019	-070	705 05	В	74A770505
17K-E017	-070	700 06	A	74A770006
17K-F011	-070	705 06	В	74A770506
17K-F011	-070	700 06	A	74A770300 74A770006
17K-F012	-070	705 06	В	74A770506
17K-F020	-070	700 06	A	74A770006
17K-F020	-070	705 06	В	74A770506
17S-U013	-070	701 23	A/B	74A770123
17S-U015	-070	701 25	A/B	74A770125
17S-V014	-070	701 24	A/B	74A770124
17S-V016	-070	701 26	A/B	74A770126
18CBH001	-010	502 01	A	74A750201
18CBH001	-010	502 13	A/B	74A750213
18CBH001	-010	503 01	В	74A750301
18J-T014	-060	602 26	A	74A760226
18J-T014	-060	603 26	В	74A760326
18K-C005	-070	700 05	A	74A770005
18K-C005	-070	705 05	В	74A770505
18K-C010	-070	705 05	В	74A770505
18K-C011	-070	700 05	A	74A770005
18K-C011	-070	705 05	В	74A770505
18P-S003	-060	612 21	A/B	74A761221

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
18P-T014	-070	702 00	A/B	74A770200
18S-S006	-070	702 00	A/B	74A770200
19CBJ001	-010	502 02	A	74A750202
19CBJ001	-010	502 12	A/B	74A750212
19CBJ001	-010	503 02	В	74A750302
19J-S013	-060	602 25	A	74A760225
19J-S013	-060	603 25	В	74A760325
19K-F005	-070	700 06	A	74A770006
19K-F005	-070	705 06	В	74A770506
19K-F007	-070	700 06	A	74A770006
19K-F007	-070	705 06	В	74A770506
19K-F010	-070	700 06	A	74A770006
19K-F010	-070	705 06	В	74A770506
19P-J003	-010	502 02	A	74A750202
19P-J003	-010	503 02	В	74A750302
19P-S013	-070	700 47	A/B	74A770047
19P-T009		612 20		
	-060		A/B	74A761220
19P-T012	-060	612 14	A/B	74A761214
19S-S006	-070	700 47	A/B	74A770047
19S-S006	-070	701 01	A/B	74A770101
19S-S008	-070	700 47	A/B	74A770047
19S-S008	-070	701 02	A/B	74A770102
2CBC001	-070	700 42	A	74A770042
2CBC001	-070	705 42	В	74A770542
2CBC007	-070	700 42	A	74A770042
2CBC007	-070	705 42	В	74A770542
2CRH014	-070	700 21	A/B	74A770021
2CRN006	-070	702 01	A/B	74A770201
2DSH004	-070	700 21	A/B	74A770021
2J-P015	-050	602 05	A/B	74A760205
2J-P015	-050	602 07	A/B	74A760207
2J-P015	-060	602 35	A/B	74A760235
2K-C016	-070	700 05	A	74A770005
2K-C016	-070	705 05	A/B	74A770505
2K-N005	-070	702 01	A/B	74A770201
2K-N008	-070	702 01	A/B	74A770201
2K-N009	-070	702 01	A/B	74A770201
2K-N017	-070	702 01	A/B	74A770201
2P-M010A	-060	602 26	A/B A	74A770201 74A760226
2P-M010A 2P-M010A	-060	603 26	B	74A760326
2P-M010A 2P-M010B				
	-060	602 35	A/B	74A760235
2P-N010A	-050	602 07	A/B	74A760207
2P-N010B	-050	602 07	A/B	74A760207
2P-P011	-050	602 05	A/B	74A760205
2P-P012	-050	602 05	A/B	74A760205
2S-G002	-020	532 11	A	74A753211
2S-G002	-030	533 11	В	74A753311
2S-H003	-070	700 21	A/B	74A770021
2S-P023	-050	602 05	A/B	74A760205
20A-J003	-070	700 24	A	74A770024
20A-J003	-070	705 24	В	74A770524
20CBC001	-070	700 42	A	74A770042
20CBC001	-070	705 42	В	74A770542
20CBC002	-070	700 42	A	74A770042
20CBC002	-070	705 42	В	74A770542
20J-J003	-010	502 02	A	74A750202
20J-J003	-010	503 02	В	74A750302
20J-L013	-010	503 20	В	74A750320

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
20J-L014	-010	503 02	В	74A750302
20K-D016	-070	700 04	A	74A770004
20K-D016	-070	705 04	В	74A770504
20K-L004	-010	502 02	A	74A750202
20K-L004	-010	502 14	A	74A750214
20K-L004	-010	503 02	В	74A750302
20K-L004	-010	503 20	В	74A750320
20K-L005	-010	502 02	A	74A750202
20K-L005	-010	502 14	A	74A750214
20K-L005	-010	503 02	В	74A750302
20K-L005	-010	503 20	В	74A750320
20K-L015	-010	503 02	В	74A750302
20P-E012	-010	503 14	В	74A750302
20P-J003	-070	700 24		
			A	74A770024
20P-J003	-070	705 24	В	74A770524
20P-K006	-010	502 14	A	74A750214
20P-L013	-010	503 14	В	74A750314
20P-L014	-070	706 20	В	74A770620
20S-CO10	-020	532 11	A	74A753211
20S-CO10	-030	533 11	В	74A753311
20S-E007	-070	706 20	В	74A770620
20S-F008	-070	706 20	В	74A770620
20S-J003	-070	700 24	A	74A770024
20S-J003	-070	705 24	В	74A770524
20S-L007	-070	701 20	A	74A770120
20S-L008	-070	701 19	A	74A770119
20S-M009	-070	701 21	A/B	74A770121
22CBC035	-070	700 42	A	74A770042
22CBC035	-070	705 42	В	74A770542
22CBC033 22CBC040	-070	700 05		74A770005
			A	
22CBC040	-070	705 05	В	74A770505
22CBC062	-070	700 05	A	74A770005
22CBC062	-070	705 05	В	74A770505
22CBC063	-070	700 05	A	74A770005
22CBC063	-070	705 05	В	74A770505
22CBC064	-070	700 05	A	74A770005
22CBC064	-070	705 05	В	74A770505
22CBC074	-070	700 05	A	74A770005
22CBC074	-070	705 05	В	74A770505
22CBC077	-070	700 05	A	74A770005
22CBC077	-070	705 05	В	74A770505
22CBC078	-070	700 05	A	74A770005
22CBC078	-070	705 05	В	74A770505
22CBC079	-070	700 05	A	74A770005
22CBC079	-070	705 05	В	74A770505
22CBC080	-070	700 05	A	74A770005
22CBC080	-070	705 05	В	74A770505
22CBC081	-070	700 05	A	74A770005
22CBC081	-070	705 05	В	74A770505
	-070	703 03		
22CBC082			A	74A770005
22CBC082	-070	705 05	В	74A770505
22CBC106	-070	700 05	A	74A770005
22CBC106	-070	705 05	В	74A770505
22CBD020	-070	700 02	A/B	74A770002
22CBD020	-070	700 04	A/B	74A770004
22CBD020	-070	705 04	В	74A770504
22CBD034	-070	700 02	A/B	74A770002
22CBD036	-070	700 02	A/B	74A770002

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
22CBD036	-070	700 04	A/B	74A770004
22CBD036	-070	705 04	В	74A770504
22CBD037	-070	700 04	A/B	74A770004
22CBD037	-070	705 04	В	74A770504
22CBD052	-070	700 02	A/B	74A770002
22CBD053	-070	700 02	A/B	74A770002
22CBD054	-070	700 02	A/B	74A770002
22CBD057	-070	700 02	A/B	74A770002
22CBD057	-070	700 04	A/B	74A770004
22CBD057	-070	705 04	В	74A770504
22CBD059	-070	700 02	A/B	74A770002
22CBD060	-070	700 02	A/B	74A770002
22CBD061	-070	700 02	A/B	74A770002
22CBD070	-070	700 02	A/B	74A770002
22CBD070	-070	700 04	A/B	74A770004
22CBD070	-070	705 04	В	74A770504
22CBD070 22CBD071	-070	700 02	A/B	74A770002
22CBD071	-070	700 02	A/B	74A770002
22CBD071 22CBD071	-070	705 04	B B	74A770504
22CBD071 22CBD094	-070	700 10	A/B	74A770010
22CBD104	-070	700 10	A/B	74A770010
22CBD173	-070	700 04	A	74A770004
22CBD173	-070	705 04	В	74A770504
22J-A090	-070	700 09	A/B	74A770009
22J-C108	-020	532 11	A	74A753211
22J-C108	-030	533 11	В	74A753311
22J-D096	-020	532 18	A	74A753218
22J-D096	-030	533 18	В	74A753318
22J-E098	-020	532 17	A	74A753217
22J-E098	-030	533 17	В	74A753317
22J-F096	-020	532 18	A	74A753218
22J-F096	-030	533 18	В	74A753318
22J-K171	-010	503 01	В	74A750301
22J-M099	-040	542 11	A/B	74A754211
22J-S027	-060	612 22	A/B	74A761222
22J-S030	-060	612 10	A/B	74A761210
22J-S030	-070	702 00	A/B	74A770200
22K-C016	-070	700 05	A	74A770005
22K-C016	-070	705 05	A	74A770505
22K-C042	-070	700 05	A	74A770005
22K-C042	-070	705 05	В	74A770505
22K-C042 22K-C043	-070	700 05	A	74A770005
22K-C043	-070	705 05	A/B	74A770505
22K-C065	-070 070	700 05	A	74A770005
22K-C065	-070	705 05	В	74A770505
22K-C072	-070	700 05	A	74A770005
22K-C072	-070	705 05	В	74A770505
22K-C075	-070	700 05	A	74A770005
22K-C075	-070	705 05	В	74A770505
22K-C083	-070	700 05	A	74A770005
22K-C083	-070	705 05	В	74A770505
22K-C085	-070	700 05	A	74A770005
22K-C085	-070	705 05	В	74A770505
22K-C103	-070	700 05	A	74A770005
22K-C103	-070	705 05	В	74A770505
22K-C109	-070	700 05	A	74A770005
22K-C109	-070	705 05	В	74A770505
22K-C111	-070	705 05	В	74A770505

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
22K-C112	-070	705 05	В	74A770505
22K-D055	-020	532 11	A	74A753211
22K-D055	-020	532 12	A	74A753212
22K-D055	-030	533 11	В	74A753311
22K-D055	-030	533 12	В	74A753312
22K-D168	-070	700 04	A	74A770004
22K-D168	-070	705 04	В	74A770504
22K-D169	-070	705 04	В	74A770504
22K-E001	-070	700 07	A	74A770007
22K-E001	-070	705 07	В	74A770507
22K-E038	-070	700 07	A	74A770007
22K-E038	-070	705 07	В	74A770507
22K-E039	-070	700 07	A	74A770007
22K-E039	-070	705 07	В	74A770507
22K-E144	-070	700 07	A	74A770007
22K-E144	-070	705 07	В	74A770507
22K-E145	-070	700 07	A	74A770007
22K-E145	-070	705 07	В	74A770507
22K-E143	-070	700 07	A	74A770007
22K-E158	-070	705 07	В	74A770507
22K-E158 22K-E160	-070	700 07	A	74A770007
22K-E160 22K-E160		705 07		
	-070		В	74A770507
22K-E175	-070	700 07	A	74A770007
22K-E175	-070	705 07	В	74A770507
22K-F066	-070	700 06	A	74A770006
22K-F066	-070	705 06	В	74A770506
22K-F107	-070	700 06	A	74A770006
22K-F107	-070	705 06	В	74A770506
22K-N021	-070	702 01	A/B	74A770201
22K-N028	-070	702 01	A/B	74A770201
22K-N029	-070	702 01	A/B	74A770201
22K-N046	-070	702 01	A/B	74A770201
22L-D096	-070	701 59	A/B	74A770159
22L-E098	-070	701 69	A/B	74A770169
22M-A092	-070	700 09	A/B	74A770009
22P-A087	-020	532 11	A	74A753211
22P-A087	-030	533 11	В	74A753311
22P-A088	-020	532 11	A	74A753211
22P-A088	-030	533 11	В	74A753311
22P-A089	-020	532 11	A	74A753211
22P-A089	-030	533 11	В	74A753311
22P-A090	-020	532 11	A	74A753211
22P-A090	-030	533 11	В	74A753311
22P-D002A	-020	532 18	A	74A753218
22P-D002A	-030	533 18	В	74A753318
22P-D002B	-020	532 18	A	74A753218
22P-D002B	-030	533 18	В	74A753318
22P-D096	-070	701 59	A/B	74A770159
22P-E003	-020	532 18	A	74A753218
22P-E003	-030	533 18	В	74A753318
22P-E004	-020	532 18	A	74A753218
22P-E004	-030	533 18	В	74A753318
22P-E007	-020	532 18	A	74A753318 74A753218
22P-E007	-030	533 18	В	74A753218 74A753318
22P-E007 22P-E010				
	-020	532 18	A	74A753218
22P-E010	-030	533 18	В	74A753318
22P-E098	-020	532 17	A	74A753217
22P-E098	-030	533 17	В	74A753317

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
22P-E098	-070	701 69	A/B	74A770169
22P-F096	-070	701 59	A/B	74A770159
22P-G056	-030	532 35	A/B	74A753235
22P-G073	-020	532 06	A	74A753206
22P-G073	-030	533 06	В	74A753306
22P-G108	-030	532 35	A/B	74A753235
22P-G172	-020	532 06	A	74A753206
22P-G172	-030	533 06	В	74A753306
22P-H069	-010	502 01	A	74A750201
22P-H069	-010	503 01	В	74A750301
22P-J026	-010	502 02	A	74A750202
22P-J026	-010	503 02	В	74A750302
22P-J068	-010	502 02	A	74A750202
22P-J068	-010	503 02	В	74A750302
22P-K102	-010	502 01	A	74A750201
22P-K114	-010	503 01	В	74A750301
22P-K170	-010	502 01	A	74A750201
22P-K171	-010	502 01	A	74A750201
22P-L102	-010	503 02	В	74A750302
22P-L113	-010	503 02	В	74A750302
22P-L170	-010	503 02	В	74A750302
22P-M008	-050	602 05	A/B	74A760205
22P-M009	-050	602 05	A/B	74A760205
22P-M076	-040	542 13	A/B	74A754213
22P-M084	-040	542 11	A/B	74A754211
22P-M086	-040	542 11	A/B	74A754211
22P-M099	-040	542 13	A/B	74A754213
22P-N014	-050	602 07	A/B	74A760207
22P-N017	-050	602 07	A/B	74A760207
22P-P005	-050	602 05	A/B	74A760205
22P-P012	-050	602 05	A/B	74A760205
22P-P030	-050	602 09	A/B	74A760209
22P-R006	-050	602 05	A/B	74A760205
22P-R015A	-050	602 07	A/B	74A760207
22P-R015B	-050	602 07	A/B	74A760207
22P-R016	-050	602 07	A/B	74A760207
22P-R010 22P-R110	-050	602 07	A/B A/B	74A760207
22P-S018	-060	612 22	A/B A/B	74A761222
22P-S019	-060	612 22	A/B A/B	74A761222 74A761222
22P-S023	-060	612 22	A/B A/B	74A761222 74A761222
22P-S024 22P-S025	-060	612 19 612 10	A/B	74A761219
22P-S025 22P-S027	-060		A/B A/B	74A761210
	-060	612 10		74A761210
22P-T022	-060	612 13	A/B	74A761213
22R-E148	-070	700 07	A	74A770007
22R-E148	-070	705 07	B	74A770507
22R-J047	-070	700 16	A/B	74A770016
22S-A091	-070	700 09	A/B	74A770009
22S-A105	-070	700 09	A/B	74A770009
22S-J044	-070	700 16	A/B	74A770016
22S-J045	-070	700 16	A/B	74A770016
22S-J048	-070	700 16	A/B	74A770016
22S-J058	-070	700 32	A/B	74A770032
22S-J095	-010	502 02	A	74A750202
22S-J095	-010	503 02	В	74A750302
22S-L115	-070	705 53	В	74A770553
22S-P032	-050	602 05	A/B	74A760205
22S-P051	-070	702 00	A/B	74A770200

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
23CBD001	-070	700 02	A/B	74A770002
23CBD001	-070	700 04	A/B	74A770004
23CBD001	-070	705 04	В	74A770504
23P-B002	-020	532 16	A	74A753216
23P-B002	-030	533 16	В	74A753316
23P-B003	-020	532 16	A	74A753216
23P-B003	-030	533 16	В	74A753316
24CBC018	-070	700 42	A	74A770042
24CBC018	-070	705 42	В	74A770542
24CBD001	-070	700 10	A/B	74A770010
24K-E019	-070	700 07	A	74A770007
24K-E019	-070	705 07	В	74A770507
24K-E020	-070	700 07	A	74A770007
24K-E020	-070	705 07	В	74A770507
24K-N014	-070	702 01	A/B	74A770201
24K-N015	-070	702 01	A/B	74A770201
24P-M002	-050	602 05	A/B	74A760205
24P-N006	-060	602 25	A	74A760205
24P-N006	-060	603 25	В	74A760325
24P-N021	-060	602 25	A	74A760325
24P-N021	-060	603 25	В	74A760325
24P-P003	-050	602 05	A/B	74A760205
24P-P005	-060	602 26	A	74A760226
24P-P005	-060	603 26	В	74A760326
24P-P007	-060	602 26	A	74A760226
24P-P007	-060	603 26	В	74A760326
24P-P011	-060	602 31	A/B	74A760231
24P-R004	-060	602 25	A	74A760225
24P-R004	-060	603 25	В	74A760325
24P-S009	-060	612 19	A/B	74A761219
24P-T008	-060	612 10	A/B	74A761210
24P-T010	-060	612 13	A/B	74A761213
25CBC001	-070	700 05	A	74A770005
25CBC001	-070	705 05	В	74A770505
25CBC003	-070	705 42	В	74A770542
25P-H002	-010	502 01	A	74A750201
25P-H002	-010	503 01	В	74A750301
25P-K004	-010	503 01	В	74A750301
28CBC001	-070	700 05	A	74A770005
28CBC001	-070	705 05	В	74A770505
28CBC001 28CBC003	-070	700 05		74A770305 74A770005
	-070	705 05	A	74A770003 74A770505
28CBC003			В	
28CBC005	-070	700 05	A	74A770005
28CBC005	-070	705 05	B	74A770505
28CBD002	-070	700 02	A/B	74A770002
28CBD004	-070	700 02	A/B	74A770002
28CBD007	-070	700 02	A/B	74A770002
28CBD007	-070	700 04	A/B	74A770004
28CBD007	-070	705 04	В	74A770504
28E-A013	-020	522 03	A/B	74A752203
28E-A021	-020	522 03	A/B	74A752203
28E-B014	-020	522 03	A/B	74A752203
28E-B022	-020	522 03	A/B	74A752203
28E-E019	-020	532 19	A	74A753219
28E-E019	-030	533 19	В	74A753319
28K-C009	-070	700 05	A	74A770005
28K-C009	-070	705 05	В	74A770505
	· · · · ·	700 05	A	74A770005

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
28K-C011	-070	705 05	В	74A770505
28K-C020	-070	700 05	A	74A770005
28K-C020	-070	705 05	В	74A770505
28K-F010	-070	700 06	A	74A770006
28K-F010	-070	705 06	В	74A770506
28K-F012	-070	700 06	A	74A770006
28K-F012	-070	705 06	В	74A770506
28P-A017	-020	522 03	A/B	74A752203
28P-B015	-020	522 03	A/B	74A752203
28P-B016	-020	522 03	A/B	74A752203
28P-B018	-020	522 03	A/B	74A752203
28S-J008	-070	700 16	A/B	74A770016
3CBC012	-070	700 42	A	74A770042
3CBC012	-070	705 42	В	74A770542
3CBC021	-070	700 05	A	74A770005
3CBC021	-070	705 05	В	74A770505
3CBC025	-070	700 05	A	74A770005
3CBC025	-070	705 05	В	74A770505
3CBC028	-070	700 05	A	74A770005
3CBC038	-070	705 05	В	74A770505
3CBC039	-070	700 05	A	74A770005
3CBC039	-070	705 05	В	74A770505
3CBC040	-070	700 05	A	74A770005
3CBC040	-070	705 05	В	74A770505
3CBD029	-070	700 02	A/B	74A770002
3CBD029 3CBD029	-070	700 02	A/B A/B	74A770002 74A770004
3CBD029 3CBD029	-070	705 04	В	74A770504
3CBD029 3CBD041	-070	700 02	A/B	74A770002
3CBD041 3CBD042	-070	700 02	A/B A/B	74A770002 74A770002
3CBD043	-070	700 02	A/B	74A770002
3CBD052 3CBD062	-070 -070	700 10 700 04	A/B	74A770010
	-070	700 04	A/B	74A770004
3CBD076 3CBD077	-070	700 10	A/B A/B	74A770010
	-070 -060	602 26		74A770010
3J-M028			A	74A760226
3J-M028	-060	603 26	В	74A760326
3J-N033	-060	602 25	A	74A760225
3J-N033	-060	603 25	В	74A760325
3K-C019	-070	700 05	A	74A770005
3K-C019	-070	705 05	В	74A770505
3K-C020	-070	700 05	A	74A770005
3K-C020	-070	705 05	B	74A770505
3K-N004	-070	702 01	A/B	74A770201
3K-N005	-070	702 01	A/B	74A770201
3K-N013	-070	702 01	A/B	74A770201
3K-N014	-070	702 01	A/B	74A770201
3K-N017	-070	702 01	A/B	74A770201
3K-N018	-070	702 01	A/B	74A770201
3K-N027	-070	702 01	A/B	74A770201
3K-N032	-070	702 01	A/B	74A770201
3K-N034	-070	702 01	A/B	74A770201
3K-N035	-070	702 01	A/B	74A770201
3K-N036	-070	702 01	A/B	74A770201
3K-N037	-070	702 01	A/B	74A770201
3K-N057	-070	702 01	A/B	74A770201
3K-N058	-070	702 01	A/B	74A770201
3K-N072	-070	702 01	A/B	74A770201
3K-N073	-070	702 01	A/B	74A770201

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
3L-H023	-070	700 31	A/B	74A770031
3L-H024	-070	700 31	A/B	74A770031
3P-E079	-020	532 19	A	74A753219
3P-E079	-030	533 19	В	74A753319
3P-H001	-010	502 01	A	74A750201
3P-H001	-010	503 01	В	74A750301
3P-K002	-010	503 01	В	74A750301
3P-M008	-050	602 05	A/B	74A760205
3P-N008	-050	602 07	A/B	74A760207
3P-P006	-050	602 19	A/B	74A760219
3P-P010	-050	602 19	A/B	74A760219
3P-P055	-050	602 19	A/B	74A760219
3P-P059	-070	991 15	A/B	99115
3P-P064	-050	602 19	A/B	74A760219
3P-P095	-060	602 31	A/B	74A760231
3P-P095	-070	986 04	A/B	74R798604
3P-R007	-050	602 13	A/B	74A760213
3P-R011	-050	602 13	A/P	74A760213
3P-R056	-050	602 13	A/B	74A760213
3P-R060	-070	991 10	A/B	99110
3P-R065	-050	602 13	A/B	74A760213
3P-R096	-060	602 33	A/B	74A760233
3P-R096	-070	986 05	A/B	74R798605
3S-H003	-070	700 21	A/B	74A770021
33CBD001	-070	700 10	A/B	74A770010
33CBD003	-070	700 02	A/B	74A770002
33CBD004	-070	700 02	A/B	74A770002
33CBD005	-070	700 02	A/B	74A770002
33CBD010	-070	700 10	A/B	74A770010
33P-H011	-010	502 01	A	74A750201
33P-H011	-010	503 01	В	74A750301
33P-J002	-010	502 02	A	74A750202
33P-J002	-010	503 02	В	74A750302
33P-J007	-010	502 02	A	74A750202
33P-J007	-010	503 02	В	74A750302
33P-J008	-010	502 02	A	74A750202
33P-J008	-010	503 02	В	74A750302
33P-J009	-070	701 34	A/B	74A770134
33P-J015	-010	502 02	A	74A750202
33P-J015	-010	503 02	В	74A750302
33P-L016	-010	503 02	В	74A750302
33P-L017	-010	503 02	В	74A750302
33P-L018	-010	503 02	В	74A750302
33P-L019	-010	503 23	В	74A750323
33P-L020	-010	503 02	В	74A750302
34CBD001	-070	700 04	A/B	74A770004
34CBD001	-070	705 04	В	74A770504
34CBD002	-070	700 02	A/B	74A770002
34CBD002	-070	700 04	A/B	74A770004
34K-F005	-070	700 06	A	74A770006
34K-F005	-070	705 06	В	74A770506
34K-F008	-070	700 06	A	74A770006
34K-F008	-070	705 06	В	74A770506
34K-F009	-070	700 06	A	74A770006
34K-F009	-070	705 06	В	74A770506
34K-F010	-070	700 06	A	74A770006
34K-F010	-070	705 06	В	74A770506
34P-D011	-020	532 12	A	74A770300 74A753212
3-F-D011	-020	332.12	А	1+M133212

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
34P-D011	-030	533 12	В	74A753312
34P-G003	-020	532 13	A/B	74A753213
34P-G003	-070	943 65	A/B	74R794365
34P-P004	-060	602 31	A/B	74A760231
34S-H007	-070	700 13	A/B	74A770013
4CBC002	-070	700 42	A	74A770042
4CBC002	-070	705 42	В	74A770542
4CBD001	-070	700 10	A/B	74A770010
4CBD100	-070	700 10	A/B	74A770010
4DSH024	-070	700 11	A	74A770011
4DSH024	-070	705 11	В	74A770511
4K-N112	-070	702 01	A/B	74A770201
4K-N114	-070	702 01	A/B	74A770201
4P-P009	-050	602 19	A/B	74A760219
4P-P010	-050	602 19	A/B	74A760219
4P-P021	-050	602 09	A/B	74A760209
4P-R015	-060	602 48	A/B	74A760248
4P-R016	-050	602 13	A/B	74A760213
4P-R022	-050	602 09	A/B	74A760209
4P-R023	-060	602 33	A/B	74A760233
4P-S011	-060	602 26	A	74A760226
4P-S011	-060	603 26	В	74A760326
4P-S013	-060	602 26	A	74A760226
4P-S013	-060	603 26	В	74A760326
4P-S014	-060	602 25	A	74A760225
4P-S014	-060	603 25	В	74A760325
4P-T017	-060	602 26	A A	74A760226
4P-T017	-060	603 26	В	74A760326
4P-T019	-060	602 26	A	74A760226
4P-T019	-060	603 26	В	74A760326
4P-T020	-060	602 25		74A760225
4P-T020	-060	603 25	A B	74A760325
4P-T109A	-060	602 25	A	74A760225
4P-T109A 4P-T109A	-060	603 25	B B	74A760325
4P-T109A 4P-T109B	-060	602 26	A	74A760226
4P-T109B		603 26	В	74A760326
4P-T109B 4P-T109C	-060	602 25		74A760326 74A760225
	-060		A	
4P-T109C 4P-T109D	-060	603 25	В	74A760325
	-060	602 25	A	74A760225
4P-T109D	-060	603 25	В	74A760325
4S-H026	-010	502 01	A	74A750201
4S-H026	-010	503 01	В	74A750301
5A-E028	-030 070	533 24	B A/D	74A753324
5A-E035	-070	701 73	A/B	74A770173
5A-E035	-070	701 74	A/B	74A770174
5A-F028	-030	532 24	A	74A753224
5A-F029	-030	532 24	A	74A753224
5A-F029	-030	533 24	B	74A753324
5A-H027	-070	700 33	A/B	74A770033
5A-S149	-070	702 00	A/B	74A770200
5A-T150	-070	702 00	A/B	74A770200
5A-U037	-040	542 14	A/B	74A754214
5A-U038	-040	542 14	A/B	74A754214
5A-U039	-040	542 14	A/B	74A754214
5A-V041	-040	552 14	A/B	74A755214
5A-V042	-040	552 14	A/B	74A755214
5A-V043	-040	552 14	A/B	74A755214
5A-Y062	-040	562 10	A/B	68A756210

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
5A-Y062	-040	562 12	A/B	68A756212
5A-Y062	-070	703 03	A/B	68A770303
5CBC001	-070	700 42	A	74A770042
5CBC001	-070	705 42	В	74A770542
5CBC002	-070	700 42	A	74A770042
5CBC002	-070	705 42	В	74A770542
5CBC003	-070	700 42	A	74A770042
5CBC003	-070	705 42	В	74A770542
5CBC016	-070	700 42	A	74A770042
5CBC016	-070	705 42	В	74A770542
5CBC023	-070	700 42	A	74A770042
5CBC023	-070	705 42	В	74A770542
5CBC050	-070	700 42	A	74A770042
5CBC050	-070	705 42	В	74A770542
5CBC054	-070	700 42	A	74A770042
5CBC054	-070	705 42	В	74A770542
5CBC101	-070	700 42	A	74A770042
5CBC101	-070	705 42	В	74A770542
5CBC101	-070	700 42	A	74A770042
5CBC115	-070	705 42	В	74A770542
5CBC148	-070	700 05	A	74A770005
5CBC148	-070	705 05	В	74A770505
5CBC153	-070	700 05	A	74A770005
5CBC153	-070	705 05	В	74A770505
5CBC157	-070	700 05	A	74A770005
5CBC157	-070	705 05	В	74A770005
5CBC162	-070	700 05	A	74A770005
5CBC162	-070	705 05	В	74A770005
5CBD044	-070	700 02	A/B	74A770002
5CBD044 5CBD063	-070	700 02	A/B A/B	74A770002 74A770010
5CBD063 5CBD064	-070	700 10	A/B A/B	74A770010 74A770010
5CBD065	-070	700 10	A/B A/B	74A770010 74A770010
5CBD065 5CBD066	-070	700 10	A/B A/B	74A770010 74A770010
5CBD000 5CPY153	-070	703 03	A/B A/B	68A770303
5DSB008	-070	701 03	A/B A/B	74A770103
5DSB133	-070	701 03	A/B A/B	74A770103 74A770036
5DSB133 5DSB134	-070	700 36	A/B A/B	74A770036
5DSB169	-070	700 36	A/B A/B	74A770036
5J-B019	-070	700 36	A/B A/B	74A770036
5J-E035 5J-E035	-030 -070	533 24 701 73	B A/P	74A753324
5J-E035 5J-E035	-070 -070	701 73	A/B A/B	74A770173 74A770174
5J-E035	-070	701 74	A/B A/B	74A770174 74A770175
5J-E035 5J-E035	-070 -070	701 75 701 76	A/B A/B	
5J-E035 5J-F035				74A770176
	-030	532 24	A	74A753224
5J-G024 5J-G024	-020 -030	532 19	A B	74A753219
		533 19	A/B	74A753319
5J-G024	-070 -070	943 63	A/B A/B	74R794363
5J-H027		700 33		74A770033
5J-P111	-050 070	602 19	A/B	74A760219
5J-P136	-070	702 00	A/B	74A770200
5J-P137	-070	702 00	A/B	74A770200
5J-P145	-050	602 05	A/B	74A760205
5J-R112	-050	602 13	A/B	74A760213
5J-R120	-070	702 00	A/B	74A770200
5J-R135	-060	602 25	A /D	74A760225
5J-R135	-060	602 33	A/B	74A760233
5J-R135	-060	603 25	В	74A760325

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
5J-R144	-050	602 07	A/B	74A760207
5J-U036	-040	542 14	A/B	74A754214
5J-V040	-040	552 14	A/B	74A755214
5J-Y025	-040	562 10	A/B	68A756210
5J-Y025	-040	562 11	A/B	68A756211
5J-Y025	-040	562 12	A/B	68A756212
5J-Y025	-070	703 00	A/B	68A770300
5K-C052	-070	700 42	A	74A770042
5K-C052	-070	705 42	В	74A770542
5K-C068	-070	700 05	A	74A770005
5K-C068	-070	705 05	В	74A770505
5K-C103	-070	700 42	A	74A770042
5K-C103	-070	705 42	В	74A770542
5K-C107	-070	700 42	A	74A770042
5K-C107	-070	705 42	В	74A770542
5K-C147	-070	700 05	A	74A770005
5K-C147	-070	700 50	A/B	74A770050
5K-C147	-070	705 05	В	74A770505
5K-C158	-070	700 05	A	74A770303 74A770005
5K-C158	-070	705 05	В	74A770003 74A770505
5K-C158	-070	700 05	A	74A770303 74A770005
5K-C159	-070	700 50 705 05	A/B	74A770050
5K-C159	-070		В	74A770505
5K-C161	-070	700 05	A	74A770005
5K-C161	-070	705 05	В	74A770505
5K-C163	-070	700 05	A	74A770005
5K-C163	-070	700 50	A/B	74A770050
5K-C163	-070	705 05	В	74A770505
5K-C168	-070	700 42	A	74A770042
5K-C168	-070	705 42	В	74A770542
5K-C170	-070	700 42	A	74A770042
5K-C170	-070	705 42	В	74A770542
5K-D004	-070	700 04	A	74A770004
5K-D004	-070	705 04	В	74A770504
5K-E004	-070	700 07	A	74A770007
5K-E004	-070	705 07	В	74A770507
5K-E011	-070	700 07	A	74A770007
5K-E011	-070	705 07	В	74A770507
5K-E055	-070	700 07	A	74A770007
5K-E055	-070	705 07	В	74A770507
5K-E068	-070	700 07	A	74A770007
5K-E068	-070	705 07	В	74A770507
5K-E164	-070	700 07	A	74A770007
5K-E164	-070	705 07	В	74A770507
5K-E165	-070	700 07	A	74A770007
5K-E165	-070	705 07	В	74A770507
5K-N154	-070	702 01	A/B	74A770201
5K-N155	-070	702 01	A/B	74A770201
5L-E171	-070	701 75	A/B	74A770175
5L-F160	-070	701 74	A/B	74A770174
5L-P119	-070	702 00	A/B	74A770200
5L-R110	-070	702 00	A/B	74A770200
5L-R118	-070	702 00	A/B A/B	74A770200 74A770200
5L-R167	-070	702 00	A/B A/B	74A770200 74A770200
5L-Y060	-040	562 10	A/B	68A756210
5L-Y060	-040	562 12	A/B	68A756212
5L-Y060	-070	703 01	A/B	68A770301
5L-Y061	-040	562 10	A/B	68A756210

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
5L-Y061	-040	562 12	A/B	68A756212
5L-Y061	-070	703 02	A/B	68A770302
5MTF140	-070	701 29	A/B	74A770129
5MTP126	-070	702 00	A/B	74A770200
5MTP127	-070	702 00	A/B	74A770200
5MTR125	-070	702 00	A/B	74A770200
5MTR128	-070	702 00	A/B	74A770200
5MTR130	-070	702 00	A/B	74A770200
5MTT129	-070	702 00	A/B	74A770200
5ND2-V003	-040	552 04	A	74A755204
5P-B006	-020	522 04	A/B	74A752204
5P-B007	-020	522 04	A/B	74A752204
5P-B019	-020	532 16	A	74A753216
5P-B019	-030	533 16	В	74A753316
5P-D009	-020	532 12	A	74A753212
5P-D009	-030	533 12	В	74A753312
5P-E035	-030	533 17	В	74A753317
5P-E035	-060	602 25	A	74A760225
5P-E053	-030	533 19	В	74A753319
5P-E053	-060	602 25	A	74A760225
5P-F014A	-020	532 18	A	74A753218
5P-F014A	-030	533 18	В	74A753318
5P-F014A	-030	533 22	В	74A753322
5P-F014B	-020	532 11	A	74A753211
5P-F014B	-020	532 19	A	74A753219
5P-F014B	-030	533 19	В	74A753319
5P-F029	-030	533 17	В	74A753317
5P-F029	-060	602 25	A	74A760225
5P-F035	-060	602 25	A	74A760225
5P-F116	-020	532 18	A	74A753218
5P-F116	-030	533 18	В	74A753318
5P-G024	-070	701 65	A/B	74A770165
5P-H013	-010	502 01	A	74A750201
5P-H013	-010	503 01	В	74A750301
5P-H027	-010	502 01	A	74A750201
5P-H027	-010	503 01	В	74A750301
5P-K015	-010	503 01	В	74A750301
5P-M036	-040	542 02	A/B	74A754202
5P-N040	-040	552 02	A/B	74A755202
5P-P069	-060	602 26	A	74A760226
5P-P069	-060	603 26	В	74A760326
5P-P071	-050	602 19	A/B	74A760219
5P-P072	-060	602 43	A/B	74A760243
5P-P102	-050	602 05	A/B	74A760205
5P-P113	-050	602 19	A/B	74A760219
5P-P136	-060	602 26	A	74A760226
5P-P136	-060	603 26	В	74A760326
5P-P137	-060	602 26	A	74A760226
5P-P137	-060	603 26	В	74A760326
5P-P145	-060	602 43	A/B	74A760243
5P-P151	-060	602 31	A/B	74A760231
5P-P152	-060	602 31	A/B	74A760231
5P-R030	-060	602 25	A	74A760225
5P-R030	-060	603 25	В	74A760325
5P-R031	-060	602 25	A	74A760225
5P-R031	-060	603 25	В	74A760325
5P-R032	-060	602 25	A	74A760225
5P-R032	-060	603 25	В	74A760325

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
5P-R033	-060	602 25	A	74A760225
5P-R033	-060	603 25	В	74A760325
5P-R034	-060	602 25	A	74A760225
5P-R034	-060	603 25	В	74A760325
5P-R070	-060	602 42	A/B	74A760242
5P-R114	-050	602 13	A/B	74A760213
5P-R120	-060	602 25	A	74A760225
5P-R120	-060	603 25	В	74A760325
5P-R144	-060	602 42	A/B	74A760242
5P-T104	-060	602 25	A	74A760225
5P-T104	-060	603 25	В	74A760325
5P-T106	-060	602 25	A	74A760225
5P-T106	-060	603 25	В	74A760325
5P-Y025	-040	562 30	A/B	74A756230
5R-E056	-070	700 07	A	74A770007
5R-E056	-070	705 07	В	74A770507
5R-E057	-070	700 07	A	74A770007
5R-E057	-070	705 07	В	74A770507
5S-BO10	-070	701 22	A/B	74A770122
5S-B020	-070	700 36	A/B	74A770036
5S-B020 5S-B021	-070	700 36	A/B A/B	74A770036
5S-B021 5S-B022				
	-070	700 36	A/B	74A770036
5S-B141	-070	700 36	A/B	74A770036
5S-E172	-030	533 24	В	74A753324
5S-E172	-070	701 73	В	74A770173
5S-E172	-070	701 76	A/B	74A770176
5S-H005	-070	700 33	A/B	74A770033
5S-H017	-070	700 33	A/B	74A770033
5S-H018	-070	700 33	A/B	74A770033
5S-H026	-070	700 19	A/B	74A770019
5S-H067	-070	700 33	A/B	74A770033
5S-R131	-070	702 00	A/B	74A770200
5S-R132	-070	702 00	A/B	74A770200
5T-B012	-020	532 16	A	74A753216
5T-B012	-030	533 16	В	74A753316
52A-C057	-070	700 05	A	74A770005
52A-C057	-070	705 05	A/B	74A770505
52A-C057D	-070	705 05	В	74A770505
52A-C159	-070	700 42	A	74A770042
52A-C159	-070	705 42	В	74A770542
52A-C161	-070	700 50	A/B	74A770050
52A-D024	-070	700 02	A/B	74A770002
52A-D026	-070	700 04	A/B	74A770004
52A-D026	-070	705 04	В	74A770504
52A-E059	-070	700 07	A	74A770007
52A-E059	-070	705 07	В	74A770507
52A-F058	-070	700 06	A	74A770006
52A-F058	-070	705 06	В	74A770506
52A-H087	-070	700 29	A/B	74A770029
52A-H091	-070	700 29	A/B A/B	74A770019
52A-H098	-070	700 19	A/B A/B	74A770019 74A770035
52A-H098 52A-J078	-070	700 33 700 16	A/B A/B	74A770033 74A770016
52A-J155	-070	700 30	A/B	74A770030
52A-L309	-070	705 53	В	74A770553
52A-N118	-070	700 05	A	74A770005
52A-N118	-070	702 01	A/B	74A770201
52A-N118B	-070	702 01	A	74A770201
52A-Y312	-070	700 46	A/B	74A770046

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
52J-B021	-020	532 16	A	74A753216
52J-B021	-030	533 16	В	74A753316
52J-B023	-020	532 16	A	74A753216
52J-B023	-030	533 16	В	74A753316
52J-C022	-020	532 11	A	74A753211
52J-C022	-030	533 11	В	74A753311
52J-C051	-020	532 11	A	74A753211
52J-C051	-030	533 11	В	74A753311
52J-C057A	-070	700 05	A	74A770005
52J-C057A	-070	705 05	В	74A770505
52J-C057B	-070	700 05	A	74A770005
52J-C057B	-070	705 05	В	74A770505
52J-C057C	-070	700 05	A/B	74A770005
52J-C057C	-070	705 05	В	74A770505
52J-C057D	-070	700 05	A/B	74A770005
52J-C057D	-070	705 05	В	74A770505
52J-C057E	-070	700 05	A	74A770005
52J-C057E	-070	705 05	A/B	74A770505
52J-C057F	-070	700 05	A	74A770005
52J-C057F	-070	705 05	В	74A770505
52J-C057G	-030	533 19	В	74A753319
52J-C057G	-070	700 05	A	74A770005
52J-C057G	-070	705 05	B	74A770005 74A770505
52J-C159A	-070	700 42	A	74A770303 74A770042
	-070	705 42	B	
52J-C159A		703 42		74A770542
52J-C159B	-070		A	74A770042
52J-C159B	-070	705 42	В	74A770542
52J-C159C	-070	700 42	A	74A770042
52J-C159C	-070	705 42	В	74A770542
52J-C159D	-070	700 42	A	74A770042
52J-C159D	-070	705 42	В	74A770542
52J-C159E	-070	700 42	A	74A770042
52J-C159E	-070	705 42	В	74A770542
52J-C159F	-070	700 42	A	74A770042
52J-C159F	-070	705 42	В	74A770542
52J-C159G	-070	700 42	A	74A770042
52J-C159G	-070	705 42	В	74A770542
52J-C161	-070	700 50	A/B	74A770050
52J-D024A	-070	700 02	A/B	74A770002
52J-D024B	-070	700 02	A/B	74A770002
52J-D024C	-070	700 02	A/B	74A770002
52J-D024D	-070	700 02	A/B	74A770002
52J-D024E	-070	700 02	A/B	74A770002
52J-D026A	-070	700 04	A/B	74A770004
52J-D026A	-070	705 04	В	74A770504
52J-D026B	-070	700 04	A/B	74A770004
52J-D026B	-070	705 04	В	74A770504
52J-D026C	-070	700 04	A/B	74A770004
52J-D026C	-070	705 04	В	74A770504
52J-D026D	-070	700 04	A/B	74A770004
52J-D026D	-070	705 04	В	74A770504
52J-D092A	-070	700 10	A/B	74A770010
52J-D092B	-070	700 10	A/B	74A770010
52J-D092C	-070	700 10	A/B	74A770010
52J-E007	-020	532 17	A	74A753217
52J-E007	-030	533 17	В	74A753317
52J-E009A	-020	532 16	A	74A753216
			1	

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
52J-E010A	-020	532 19	A	74A753219
52J-E010B	-020	532 19	A	74A753219
52J-E010N	-020	532 19	A	74A753219
52J-E011	-020	532 19	A	74A753219
52J-E011	-030	533 19	В	74A753319
52J-E059	-070	700 04	A	74A770004
52J-E059	-070	700 07	A	74A770007
52J-E059	-070	705 04	В	74A770504
52J-E059	-070	705 07	В	74A770507
52J-E154	-030	533 19	В	74A753319
52J-F001	-020	532 14	A	74A753214
52J-F001	-030	533 14	В	74A753314
52J-F002A	-020	532 14	A	74A753214
52J-F002B	-020	532 14	A	74A753214
52J-F002B	-070	943 68	A/B	74R794368
52J-F003	-050	602 07	A/B	74A760207
52J-F004A	-020	532 16	A	74A753216
52J-F004A	-030	533 16	В	74A753316
52J-F004B	-020	532 16	A	74A753216
52J-F005A	-020	532 18	A	74A753218
52J-F005B	-020	532 18	A	74A753218
52J-F006	-050	602 07	A/B	74A760207
52J-F058A	-070	700 06	A	74A770006
52J-F058A	-070	705 06	В	74A770506
52J-F058B	-070	700 06	A	74A770006
52J-F058B	-070	705 06	B B	74A770000 74A770506
52J-F058C	-070	700 06	A	74A770006
52J-F058C	-070	705 06	B B	74A770000 74A770506
52J-F058D	-070	700 06		74A770306 74A770006
			A	
52J-F058D	-070	705 06	В	74A770506
52J-F058E	-070 -070	700 06 705 06	A	74A770006
52J-F058E	-070	532 19	В	74A770506
52J-G040	-020	532 19	A B	74A753219
52J-G040		502 01		74A753319
52J-H032	-010		A	74A750201
52J-H032	-010	503 01	В	74A750301
52J-H033	-010	502 01	A	74A750201
52J-H033	-010	503 01	В	74A750301
52J-H034	-010	502 01	A	74A750201
52J-H034	-010	503 01	В	74A750301
52J-H039	-010	502 01	A	74A750201
52J-H039	-010	503 01	В	74A750301
52J-H046	-010	502 03	A	74A750203
52J-H046	-010	503 03	В	74A750303
52J-H048	-010	502 01	A	74A750201
52J-H048	-010	503 01	В	74A750301
52J-H049	-010	502 01	A	74A750201
52J-H049	-010	503 01	В	74A750301
52J-H073	-010	502 01	A	74A750201
52J-H073	-010	503 01	В	74A750301
52J-H075	-070	700 11	A	74A770011
52J-H075	-070	705 11	В	74A770511
52J-H077A	-070	700 13	A/B	74A770013
52J-H077B	-070	700 13	A/B	74A770013
52J-H079	-070	700 21	A/B	74A770021
52J-H081	-070	700 25	A/B	74A770025
52J-H083	-010	502 01	A	74A750201
52J-H083	-010	503 01	В	74A750301

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
52J-H085	-010	502 13	A/B	74A750213
52J-H087	-070	700 29	A/B	74A770029
52J-H088	-010	502 01	A	74A750201
52J-H088	-010	503 01	В	74A750301
52J-H088	-070	700 31	A/B	74A770031
52J-H089	-070	700 23	A	74A770023
52J-H089	-070	705 23	В	74A770523
52J-H091	-070	700 19	A/B	74A770019
52J-H098	-070	700 35	A/B	74A770035
52J-J008	-010	502 02	A	74A750202
52J-J008	-010	503 02	В	74A750302
52J-J028	-010	502 02	A	74A750202
52J-J028	-010	503 02	В	74A750302
52J-J028	-070	943 18	A	74R794318
52J-J029	-010	502 02	A	74A750202
52J-J029	-010	503 02	В	74A750302
52J-J038	-010	502 02	A	74A750202
52J-J038	-010	503 02	В	74A750302
52J-J042	-010	502 02	A	74A750202
52J-J042	-010	503 02	В	74A750302
52J-J053	-070	700 32	A/B	74A770032
52J-J074	-010	502 02	A	74A750202
52J-J074	-010	503 02	В	74A750302
52J-J074	-070	943 18	A	74R794318
52J-J076	-070	700 12	A/B	74A770012
52J-J078	-070	700 16	A/B	74A770016
52J-J080	-070	700 20	A/B	74A770020
52J-J086	-010	502 12	A/B	74A750212
52J-J155	-070	700 30	A/B	74A770030
52J-J156	-070	701 34	A/B	74A770134
52J-K301	-010	503 01	В	74A750301
52J-K302	-010	503 01	В	74A750301
52J-K304	-070	705 52	В	74A770552
52J-K307	-010	503 01	В	74A750301
52J-L030	-010	502 02	A	74A750202
52J-L030	-010	503 02	В	74A750302
52J-L050	-010	502 16	A	74A750216
52J-L050	-010	503 16	В	74A750316
52J-L050 52J-L154		502 06		74A750206
	-010		A	
52J-L160	-010	502 02	A	74A750202
52J-L160	-010	503 02	В	74A750302
52J-L308	-010	503 02	В	74A750302
52J-L309	-070	705 53	В	74A770553
52J-M069	-060	602 26	A	74A760226
52J-M069	-060	603 26	В	74A760326
52J-M071	-060	602 26	A	74A760226
52J-M071	-060	603 26	В	74A760326
52J-N070	-060	602 25	A	74A760225
52J-N070	-060	603 25	В	74A760325
52J-N072	-060	602 25	A	74A760225
52J-N072	-060	603 25	В	74A760325
52J-N118A	-070	702 01	A/B	74A770201
52J-N118B	-070	700 05	A	74A770005
52J-N118B	-070	702 01	A/B	74A770201
52J-P009	-060	603 26	В	74A760326
52J-P009A	-060	603 26	В	74A760326
52J-P009B	-060	603 26	В	74A760326
020 100/15	000	603 26	В	74A760326

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
52J-P010A	-060	603 26	В	74A760326
52J-PO10B	-060	603 26	В	74A760326
52J-P035	-050	602 05	A/B	74A760205
52J-P103	-050	602 05	A/B	74A760205
52J-P105	-050	602 09	A/B	74A760209
52J-P110	-050	602 05	A/B	74A760205
52J-P111	-060	602 32	A/B	74A760232
52J-P112	-060	602 32	A/B	74A760232
52J-P117	-050	602 05	A/B	74A760205
52J-P119	-070	991 15	A/B	99115
52J-P123	-050	602 05	A/B	74A760205
52J-P125	-050	602 19	A/B	74A760219
52J-P157	-040	562 03	A/B	74A756203
52J-P166	-060	602 26	A	74A760226
52J-P166	-060	603 26	В	74A760326
52J-R002	-060	603 25	В	74A760325
52J-R002A	-060	603 25	В	74A760325
52J-R002R	-060	603 25	В	74A760325
52J-R002B 52J-R004	-060	603 25	В	74A760325
52J-R004A	-060	603 25	В	74A760325
52J-R004B	-060	603 25	В	74A760325
52J-R005	-060	603 25	В	74A760325
52J-R005A	-060	603 25	В	74A760325
52J-R005A 52J-R005B	-060	603 25	В	74A760325
52J-R036	-050	602 07	A/B	74A760207
52J-R102	-050	602 07	A/B A/B	74A760207 74A760207
52J-R104	-050	602 13	A/B A/B	74A760213
52J-R113	-050	602 07	A/B A/B	74A760207
52J-R113	-050	602 34	A/B A/B	74A760234
52J-R114 52J-R116	-050	602 07	A/B A/B	74A760234 74A760207
52J-R110 52J-R120	-070	991 10	A/B A/B	99110
52J-R120	-070	602 48	A/B A/B	74A760248
52J-R158	-040	562 04	A/B A/B	74A756204
52J-R158 52J-R163	-040	602 25	A/B A	74A750204 74A760225
52J-R163	-060	603 25	В	74A760325
52J-R164	-060	602 25		74A760225
52J-R164	-060	603 25	A B	74A760325
52J-R165	-060	602 25		
52J-R165	-060	602 25	A B	74A760225 74A760325
52J-T108 52J-U013	-060 -040	612 13 542 04	A/B	74A761213 74A754204
52J-U013 52J-U015	-040 -040	542 04 542 01	A/B A/B	
	-040 -040	542 01 542 04	A/B A/B	74A754201
52J-U017				74A754204
52J-U019 52J-U062	-040	542 01	A/B	74A754201
	-020	532 11	A A/D	74A753211
52J-U062 52J-U062	-040	542 01	A/B	74A754201
	-040	542 12 542 04	A/B	74A754212
52J-U063	-040	542 04 542 10	A/B	74A754204
52J-U150	-040	542 10	A/B	74A754210
52J-U152	-040	542 07	A/B	74A754207
52J-V012	-040	552 04	A/B	74A755204
52J-V014	-040	552 01	A/B	74A755201
52J-V016	-040	552 04	A/B	74A755204
52J-V020	-040	552 01	A/B	74A755201
52J-V067	-040	542 04	A	74A754204
52J-V067	-040	552 04	A/B	74A755204
52J-V068	-040	552 01	A/B	74A755201
52J-V068	-040	552 12	A/B	74A755212

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
52J-V151	-040	552 10	A/B	74A755210
52J-V153	-040	552 07	A/B	74A755207
52J-Y312A	-070	700 46	A/B	74A770046
52J-Y312B	-070	700 46	A/B	74A770046
52K-F058C	-070	700 06	A	74A770006
52P-A034	-020	532 11	A	74A753211
52P-A034	-030	533 11	В	74A753311
52P-A034	-070	943 36	A/B	74R794336
52P-A046	-020	532 11	A	74A753211
52P-A046	-030	533 11	В	74A753311
52P-B021	-020	522 04	A/B	74A752204
52P-B023	-020	522 03	A/B	74A752203
52P-B042	-020	532 16	A	74A753216
52P-B042	-030	533 16	В	74A753316
52P-B156	-020	532 16	A	74A753216
52P-B156	-030	533 16	В	74A753316
52P-C029	-020	532 19	A	74A753219
52P-C029	-030	533 19	В	74A753319
52P-C032	-020	532 17	A	74A753317
52P-C032	-030	533 17	В	74A753317
52P-C033	-020	532 11	A	74A753211
52P-C033	-030	533 11	В	74A753211
52P-C039	-020	532 19	A	74A753219
52P-C039	-030	533 19	В	74A753319
52P-C039	-070	943 63	A/B	74R794363
52P-C057A	-030	532 25	A/B A/B	74A753225
52P-C057B	-020	532 23	A/B A/B	74A753225 74A753209
52P-C057C	-020	532 11	A/B A	74A753209 74A753211
52P-C057C	-020	532 19	A	74A753211 74A753219
52P-C057C	-030	533 19	B	74A753319
52P-C057C	-070	943 63	A/B	74R794363
52P-C057D	-070	532 11	A/B A	74A753211
52P-C057D	-030	533 11	B	74A753211 74A753311
52P-C057D	-070	943 36	A/B	74R794336
52P-C057E	-020	532 11	A/B A	74A753211
52P-C057E	-030	533 11	В	74A753211 74A753311
52P-C057E	-030	533 11	В	74A753311 74A753319
52P-C057E	-070	943 36	A/B	74R794336
52P-C057E	-070	532 17		
			A	74A753217
52P-C057F	-030 -020	533 17 532 11	В	74A753317 74A753211
52P-C057G 52P-C057G	-020 -020	532 11	A A	74A753211 74A753219
52P-C057G	-020	532 19	B B	74A753219 74A753319
52P-C057G 52P-C057G	-030 -070	943 17		
52P-C057G 52P-C057G			A B	74R794317 74R794327
52P-C057G 52P-C057G	-070 -070	943 27 943 29		74R794327 74R794329
52P-C057G 52P-C057G	-070 -070	943 29	A B	74R794329 74R794330
52P-C05/G 52P-C085		943 30 532 09	A/B	74R794330 74A753209
52P-C085 52P-C159A	-020 -030	532 09	A/B A/B	74A753209 74A753225
52P-C159A 52P-C159B				
	-020	532 09	A/B	74A753209
52P-C159C	-030	532 23	A/B	74A753223
52P-C159D	-030	532 23	A/B	74A753223
52P-C159E	-020	532 11	A	74A753211
52P-C159E	-030	533 11	В	74A753311
52P-C159F	-020	532 02	A	74A753202
52P-C159F	-020	532 11	A	74A753211
52P-C159F	-030	533 02	В	74A753302
52P-C159F	-030	533 11	В	74A753311

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
52P-C159F	-070	943 36	A/B	74R794336
52P-C159G	-020	532 11	A	74A753211
52P-C159G	-030	533 11	В	74A753311
52P-C161	-020	532 11	A	74A753211
52P-C161	-030	533 11	В	74A753311
52P-C161	-070	943 36	A/B	74R794336
52P-D008	-020	532 12	A	74A753212
52P-D008	-030	533 12	В	74A753312
52P-D024A	-030	532 29	A/B	74A753229
52P-D024B	-020	532 12	A	74A753212
52P-D024B	-030	532 37	A/B	74A753237
52P-D024B	-030	533 12	В	74A753312
52P-D024C	-020	532 14	A	74A753214
52P-D024C	-030	533 14	В	74A753314
52P-D024D	-020	532 12	A	74A753212
52P-D024D	-030	533 12	В	74A753312
52P-D024D	-030	533 19	В	74A753319
52P-D024D	-070	943 17	A	74R794317
52P-D024D	-070	943 29	A	74R794317 74R794329
52P-D024E	-020	532 12	A	74A753212
52P-D024E	-030	533 12	В	74A753312
52P-D026	-020	532 12	A	74A753212
52P-D026	-030	533 12	В	74A753312
52P-D026A	-020	532 12	A	74A753212
52P-D026A	-030	532 29	A/B	74A753229
52P-D026A	-030	533 12	В	74A753312
52P-D026A	-070	943 17	A	74R794317
52P-D026A	-070	943 27	В	74R794327
52P-D026B	-020	532 08	A/B	74A753208
52P-D026C	-020	532 12	A	74A753212
52P-D026C	-020	532 14	A	74A753214
52P-D026C	-030	533 12	В	74A753312
52P-D026C	-030	533 14	В	74A753314
52P-D026C	-070	943 29	A	74R794329
52P-D026C	-070	943 30	В	74R794330
52P-D026C	-070	943 68	A/B	74R794368
52P-D026C	-070	943 69	A/B	74R794369
52P-D026D	-020	532 12	A	74A753212
52P-D026D	-020	532 16	A	74A753216
52P-D026D	-030	533 12	В	74A753312
52P-D026D	-070	943 40	A/B	74R794340
52P-D028	-020	532 11	A	74A753211
52P-D028	-020	532 12	A	74A753212
52P-D028	-030	533 11	В	74A753311
52P-D028	-030	533 12	В	74A753312
52P-D028	-070	943 17	A	74R794317
52P-D028	-070	943 29	A	74R794329
52P-D029	-020	532 16	A	74A753216
52P-D029	-030	533 16	В	74A753216
52P-D038	-020	532 14	A	74A753214
52P-D038	-030	533 14	B	74A753214 74A753314
52P-D086	-030	532 37	A/B	74A753237
52P-D086 52P-D092A	-030	532 36	A/B A/B	
				74A753236
52P-D092B	-020	532 14	A	74A753214
52P-D092B	-030	533 14	В	74A753314
52P-D092C	-020	532 12	A	74A753212
52P-D092C	-030	533 12	B	74A753312
52P-E007	-050	602 05	A/B	74A760205

REFERENCE	A1-F18AC-WRM	WORK PACKAGE	MODEL	ASSEMBLY
DESIGNATION	(VOLUME NUMBER)	NUMBER		IDENTIFICATION
52P-E009	-060	602 26	A	74A760226
52P-E009A	-030	533 16	В	74A753316
52P-E009A	-060	602 26	A	74A760226
52P-E009B	-030	533 16	В	74A753316
52P-E009B	-060	602 26	A	74A760226
52P-E010	-060	602 26	A	74A760226
52P-E010A	-030	533 19	В	74A753319
52P-E010A	-060	602 26	A	74A760226
52P-E010B	-030	533 19	В	74A753319
52P-E010B	-060	602 26	A	74A760226
52P-E011	-050	602 05	A/B	74A760205
52P-E059	-020	532 17	A	74A753217
52P-E059	-030	533 17	В	74A753317
52P-E059	-070	943 63	A/B	74R794363
52P-E154	-030	533 15	В	74A753315
52P-E307	-030	533 19	В	74A753319
52P-F001	-050	602 07	A/B	74A760207
52P-F002	-060	602 25	A	74A760225
52P-F002A	-030	533 14	В	74A753314
52P-F002A	-060	602 25	A	74A760225
52P-F002B	-030	533 14	В	74A753314
52P-F002B	-060	602 25	A	74A760225
52P-F002B	-070	943 69	A/B	74R794369
52P-F003	-020	532 16	A	74A753216
52P-F003	-030	533 16	В	74A753316
52P-F004	-060	602 25	A	74A760225
52P-F004A	-030	533 16	В	74A753316
52P-F004A	-060	602 25	A	74A760225
52P-F004B	-020	532 16	A	74A753216
52P-F004B	-030	533 16	В	74A753316
52P-F004B	-060	602 25	A	74A760225
52P-F005	-060	602 25	A	74A760225
52P-F005A	-030	533 18	В	74A753318
52P-F005A	-030	533 22	В	74A753322
52P-F005A	-060	602 25	A	74A760225
52P-F005B	-030	533 18	В	74A753318
52P-F005B	-030	533 22	В	74A753322
52P-F005B	-060	602 25	A	74A760225
52P-F006	-020	532 18	A	74A753218
52P-F006	-030	533 18	В	74A753318
52P-F030	-020	532 18	A	74A753218
52P-F030	-030	533 18	В	74A753318
52P-F057F	-030	533 17	В	74A753317
52P-F058A	-020	532 14	A	74A753214
52P-F058A	-030	533 14	В	74A753314
52P-F058B	-020	532 12	A	74A753212
52P-F058B	-030	533 12	В	74A753312
52P-F058C	-020	532 12	A	74A753212
52P-F058C	-020	532 16	A	74A753216
52P-F058C	-030	533 12	В	74A753312
52P-F058C	-030	533 16	В	74A753316
52P-F058D	-020	532 14	A	74A753214
52P-F058D	-030	533 14	В	74A753314
52P-F058E	-020	532 12	A	74A753212
52P-F058E	-030	533 12	В	74A753312
52P-F160	-020	532 16	A	74A753216
52P-F160	-030	533 16	В	74A753316
52P-F308	-030	533 16	В	74A753316

REFERENCE	A1-F18AC-WRM	WORK PACKAGE		ASSEMBLY
DESIGNATION	(VOLUME NUMBER)	NUMBER	MODEL	IDENTIFICATION
52P-F308	-070	943 27	В	74R794327
52P-F308	-070	943 30	В	74R794330
52P-G022	-020	532 13	A/B	74A753213
52P-G022	-070	701 13	A/B	74A770113
52P-G022	-070	701 14	A/B	74A770114
52P-G022	-070	943 65	A/B	74R794365
52P-G051	-020	532 06	A	74A753206
52P-G051	-030	533 06	В	74A753306
52P-G051	-070	701 11	A/B	74A770111
52P-H075	-010	502 01	A	74A750201
52P-H075	-010	503 01	В	74A750301
52P-H077A	-010	502 01	A	74A750201
52P-H077A	-010	503 01	В	74A750301
52P-H077B	-010	502 01	A	74A750201
52P-H077B	-010	503 01	В	74A750301
52P-H079	-010	502 01	A	74A750201
52P-H079	-010	503 01	В	74A750301
52P-H081	-010	502 01	A	74A750201
52P-H081	-010	503 01	В	74A750301
52P-H083	-070	700 27	A/B	74A770027
52P-H084	-010	502 01	A	74A750201
52P-H084	-010	503 01	В	74A750301
52P-H087	-010	502 01	A	74A750201
52P-H087	-010	503 01	В	74A750301
52P-H088	-010	502 01	A A	74A750201
52P-H088	-010	503 01	B B	74A750201 74A750301
52P-H088	-010	700 31	A/B	74A770031
	-070 -010	502 01		
52P-H089	-010 -010	502 01	A B	74A750201
52P-H089				74A750301
52P-H091	-010	502 01	A	74A750201
52P-H091	-010	503 01	В	74A750301
52P-H098	-010	502 03	A	74A750203
52P-H098	-010	503 03	В	74A750303
52P-J053	-010	502 02	A	74A750202
52P-J053	-010	503 02	В	74A750302
52P-J076	-010	502 02	A	74A750202
52P-J076	-010	503 02	В	74A750302
52P-J078	-010	502 02	A	74A750202
52P-J078	-010	503 02	В	74A750302
52P-J080	-010	502 02	A	74A750202
52P-J080	-010	503 02	В	74A750302
52P-J155	-010	502 02	A	74A750202
52P-J155	-010	503 02	В	74A750302
52P-K303	-010	503 01	В	74A750301
52P-K304	-010	503 01	В	74A750301
52P-K305	-010	503 01	В	74A750301
52P-L050	-010	502 06	A	74A750206
52P-L050	-030	533 15	В	74A753315
52P-L154	-010	502 02	A	74A750202
52P-L309	-010	503 02	В	74A750302
52P-M069	-040	542 02	A/B	74A754202
52P-M071	-040	542 02	A/B	74A754202
52P-N070	-040	552 02	A/B	74A755202
52P-N072	-040	552 02	A/B	74A755202
52P-N118A	-060	602 25	A	74A760225
52P-N118A	-060	603 25	В	74A760325
52P-N118B	-050	602 07	A/B	74A760207
52P-N118B	-060	602 25	A	74A760225

REFERENCE DESIGNATION	A1-F18AC-WRM	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
	(VOLUME NUMBER)		A /D	74A760235
52P-N118B 52P-N118B	-060 -060	602 35 603 25	A/B B	74A760235 74A760325
52P-P035	-040	562 03	A/B	74A756203
	-040	701 15	A/B A/B	74A736203 74A770115
52P-P035				
52P-P064A	-050	602 11	A/B	74A760211
52P-P064B	-060	602 31	A/B	74A760231
52P-P064B 52P-P064B	-070	986 22	A	74R798622
	-070 -070	986 25	A	74R798625
52P-P066B 52P-P103	-070	986 22 602 09	A A/B	74R798622 74A760209
52P-P105	-050	602 19		74A760209 74A760219
52P-P105 52P-P110	-050	602 19	A/B A/B	74A760219 74A760231
52P-P111	-060	602 31	A/B A/B	74A760231
52P-P117	-060	602 31	A/B A/B	74A760231 74A760231
52P-P117	-070	986 04	A/B A/B	74R798604
52P-P119	-070	602 19	A/B A/B	74A760219
52P-P123	-060	602 46	A/B A/B	74A760219 74A760246
		602 46		74A760246
52P-P125 52P-P157	-060 -040	562 01	A/B A/B	74A760246 74A756201
52P-P157	-040	701 16	A/B A/B	74A770116
52P-P157	-070	701 16	A/B A/B	74A770116 74A770155
52P-P163	-060	602 26	A/B A	74A770133 74A760226
52P-P163	-060	603 26	B	74A760326
52P-P164	-050	602 05	A/B	74A760205
52P-P165	-060	602 26	A/B A	74A760226
52P-P165	-060	603 26	В	74A760326
52P-R036	-040	562 04	A/B	74A756204
52P-R036	-070	701 17	A/B	74A770117
52P-R065	-050	602 07	A/B	74A760207
52P-R066A	-050	602 12	A/B	74A760212
52P-R066B	-060	602 33	A/B	74A760233
52P-R066B	-070	986 26	A	74R798626
52P-R102	-050	602 09	A/B	74A760209
52P-R104	-050	602 09	A/B	74A760209
52P-R113	-060	602 33	A/B	74A760233
52P-R113	-070	986 12	A/B	74R798612
52P-R114	-060	602 33	A/B	74A760233
52P-R116	-060	602 33	A/B	74A760233
52P-R116	-070	986 05	A/B	74R798605
52P-R116	-070	986 12	A/B	74R798612
52P-R120	-050	602 13	A/B	74A760213
52P-R124	-060	602 33	A/B	74A760233
52P-R158	-040	562 02	A/B	74A756202
52P-R158	-070	701 18	A/B	74A770118
52P-R158	-070	701 56	A/B	74A770156
52P-R166	-050	602 07	A/B	74A760207
52P-S055A	-060	612 19	A/B	74A761219
52P-S055B	-060	612 19	A/B	74A761219
52P-S055C	-050	602 17	A/B	74A760217
52P-S112	-060	612 19	A/B	74A761219
52P-T056A	-060	612 13	A/B	74A761213
52P-T056B	-060	612 13	A/B	74A761213
52P-T056C	-050	602 18	A/B	74A760218
52P-T108	-060	602 25	A	74A760225
52P-T108	-060	603 25	В	74A760325
52P-U013	-060	602 26	A	74A760226
52P-U013	-060	603 26	В	74A760326
52P-U015	-060	602 26	A	74A760226

52P-U017 -060 602 26 A 7 52P-U017 -060 603 26 B 7 52P-U019 -060 602 26 A 7 52P-U019 -060 603 26 B 7 52P-U045A -070 986 23 A 7 52P-U045B -070 986 23 A 7 52P-U150 -040 542 03 A/B 7 52P-U152 -040 542 03 A/B 7 52P-V012 -060 602 25 A 7	4A760326 4A760326 4A760326 4A760326 4A760326 4A760326 4R798623 4A754203 4A754203 4A760225 4A760325 4A760325
52P-U017 -060 603 26 B 7 52P-U019 -060 602 26 A 7 52P-U019 -060 603 26 B 7 52P-U045A -070 986 23 A 7 52P-U045B -070 986 23 A 7 52P-U150 -040 542 03 A/B 7 52P-U152 -040 542 03 A/B 7 52P-V012 -060 602 25 A 7	4A760326 4A760326 4A760326 4R798623 4R798623 4A754203 4A754203 4A760225 4A760325 4A760325
52P-U019 -060 602 26 A 7 52P-U019 -060 603 26 B 7 52P-U045A -070 986 23 A 7 52P-U045B -070 986 23 A 7 52P-U150 -040 542 03 A/B 7 52P-U152 -040 542 03 A/B 7 52P-V012 -060 602 25 A 7	4A760226 4A760326 4R798623 4R798623 4A754203 4A754203 4A760225 4A760325 4A760325
52P-U019 -060 603 26 B 7 52P-U045A -070 986 23 A 7 52P-U045B -070 986 23 A 7 52P-U150 -040 542 03 A/B 7 52P-U152 -040 542 03 A/B 7 52P-V012 -060 602 25 A 7	4A760326 4R798623 4R798623 4A754203 4A754203 4A760225 4A760325 4A760325
52P-U045A -070 986 23 A 7 52P-U045B -070 986 23 A 7 52P-U150 -040 542 03 A/B 7 52P-U152 -040 542 03 A/B 7 52P-V012 -060 602 25 A 7	4R798623 4R798623 4A754203 4A754203 4A760225 4A760325 4A760325 4A760325
52P-U045A -070 986 23 A 7 52P-U045B -070 986 23 A 7 52P-U150 -040 542 03 A/B 7 52P-U152 -040 542 03 A/B 7 52P-V012 -060 602 25 A 7	4R798623 4R798623 4A754203 4A754203 4A760225 4A760325 4A760325 4A760325
52P-U045B -070 986 23 A 7 52P-U150 -040 542 03 A/B 7 52P-U152 -040 542 03 A/B 7 52P-V012 -060 602 25 A 7	4R798623 4A754203 4A754203 4A760225 4A760325 4A760325 4A760325
52P-U150 -040 542 03 A/B 7 52P-U152 -040 542 03 A/B 7 52P-V012 -060 602 25 A 7	4A754203 4A754203 4A760225 4A760325 4A760325 4A760325
52P-U152 -040 542 03 A/B 7 52P-V012 -060 602 25 A 7	4A754203 4A760225 4A760325 4A760225 4A760325
52P-V012 -060 602 25 A 7	4A760225 4A760325 4A760225 4A760325
	4A760325 4A760225 4A760325
500 V010 000 000 000 000 000 000 000 000	4A760225 4A760325
	4A760325
	4A760225
52P-V016 -060 603 25 B 7	4A760325
52P-V020 -060 602 25 A 7	4A760225
52P-V020 -060 603 25 B 7	4A760325
52P-V044A -070 986 24 A 7	4R798624
52P-V044B -070 986 24 A 7	4R798624
52P-V151 -040 552 03 A/B 7	4A755203
52P-V151 -040 552 10 B 7	4A755210
	4A755203
	4A756205
	4A756214
	4R794348
	4R794349
	9115
	9115
	9110
	9110
	4A770505
52TBC159 -070 700 42 A 7	4A770042
52TBC159 -070 705 42 B 7	4A770542
52TBE059 -070 700 07 A 7	4A770007
52TBE059 -070 705 07 B 7	4A770507
52TBF058 -070 700 06 A 7	4A770006
52TBF058 -070 705 06 B 7	4A770506
52TBF058A -070 700 06 A 7	4A770006
	4A770506
	4A770006
	4A770506
	4A770011
	4A770511
	4A770019
	4A770029
	4A770029
	4A770201
	4A770201
	4A770042
	4A770542
60CBC004 -070 700 42 A 7	4A770042
60CBC004 -070 705 42 B 7	4A770542
60CBC005 -070 700 42 A 7	4A770042
60CBC005 -070 705 42 B 7	4A770542
	4A770042
	4A770542
	4A770042
	4A770542

Page 62

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
60CBC021	-070	700 42	A	74A770042
60CBC021	-070	705 42	В	74A770542
60CBC021	-070	700 42	A	74A770042
60CBC022	-070	705 42	В	74A770542
60CBC023	-070	700 42	A	74A770042
60CBC023	-070	705 42	В	74A770542
60CBC025	-070	700 42	A	74A770042
60CBC025	-070	705 42	В	74A770542
60CBC026	-070	700 42	A	74A770042
60CBC026	-070	705 42	В	74A770542
60J-A001A	-020	532 11	A	74A753211
60J-A001A	-030	533 11	В	74A753311
60J-A001B	-020	532 11	A	74A753211
60J-A001B	-030	533 11	В	74A753311
60J-A001C	-020	532 11	A	74A753211
60J-A001C	-030	533 11	В	74A753311
60J-A001D	-020	532 11	A	74A753211
60J-A001D	-030	533 11	В	74A753311
60J-A001E	-020	520 05	A	74A752005
60J-A001E	-020	521 05	В	74A752105
		532 11		
60J-A001F	-020		A	74A753211
60J-A001F	-030	533 11	В	74A753311
60J-E007	-020	520 05	A	74A752005
60J-H017	-010	502 03	A	74A750203
60J-H017	-010	503 03	В	74A750303
60J-H018	-010	502 03	A	74A750203
60J-H018	-010	503 03	В	74A750303
60J-U012	-040	540 01	A/B	74A754001
60J-V015	-040	550 01	A/B	74A755001
60P-A017	-020	532 11	A	74A753211
60P-A017	-030	533 11	В	74A753311
60P-A018	-020	532 11	A	74A753211
60P-A018	-030	533 11	В	74A753311
60P-E007	-020	521 05	В	74A752105
60P-U013	-040	540 01	A/B	74A754001
60P-V016	-040	550 01	A/B	74A755001
60S-J002	-070	700 20	A/B	74A770020
60S-J024	-070	700 12	A/B	74A770012
61A-P190	-070	986 22	A/B A	74R798622
61A-P191	-070 070	986 22	A A/D	74R798622
61A-Y287	-070	943 79	A/B	74R794379
61CBC048	-070	700 42	A	74A770042
61CBC048	-070	705 42	В	74A770542
61CBC049	-070	700 42	A	74A770042
61CBC049	-070	705 42	В	74A770542
61CBC050	-070	700 42	A	74A770042
61CBC050	-070	705 42	В	74A770542
61CBC051	-070	700 05	A	74A770005
61CBC051	-070	705 05	В	74A770505
61CBC052	-070	700 05	A	74A770005
61CBC052	-070	705 05	В	74A770505
61CBC055	-070	700 05	A	74A770005
61CBC055	-070	705 05	В	74A770505
61CBC056	-070	700 05	A	74A770005
61CBC056	-070	705 05	В	74A770505
61CBC057	-070	700 05	A	74A770005
61CBC057	-070	705 05	В	74A770505
	-070			
61CBC058	-0/0	700 05	A	74A770005

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
61CBC058	-070	705 05	В	74A770505
61CBC059	-070	700 05	A	74A770005
61CBC059	-070	705 05	В	74A770505
61CBC060	-070	700 05	A	74A770005
61CBC060	-070	705 05	В	74A770505
61CBC061	-070	700 05	A	74A770005
61CBC061	-070	705 05	В	74A770505
61CBC062	-070	700 05	A	74A770005
61CBC062	-070	705 05	В	74A770505
61CBC063	-070	700 05	A	74A770005
61CBC063	-070	705 05	В	74A770505
61CBC064	-070	700 05	A	74A770005
61CBC064	-070	705 05	В	74A770505
61CBC065	-070	700 05	A	74A770005
61CBC065	-070	705 05	В	74A770505
61CBC066	-070	700 05	A	74A770005
61CBC066	-070	705 05	В	74A770505
61CBC091	-070	700 42	A	74A770042
61CBC091	-070	705 42	В	74A770542
61CBC092	-070	700 42	A	74A770042
61CBC092	-070	705 42	В	74A770542
61CBC144	-070	700 05	A	74A770005
61CBC144	-070	705 05	В	74A770505
61CBC145	-070	700 05	A	74A770005
61CBC145	-070	705 05	В	74A770505
61CBC154	-070	700 05	A	74A770005
61CBC154	-070	705 05	В	74A770505
61CBC242	-070	700 42	A	74A770042
61CBC242	-070	705 42	В	74A770542
61CBC243	-070	700 42	A	74A770042
61CBC243	-070	705 42	В	74A770542
61CBD002	-070	700 10	A/B	74A770010
61CBD003	-070 -070	700 02	A/B A/B	74A770002
61CBD003 61CBD004	-070 -070	700 04 700 02	A/B A/B	74A770004 74A770002
61CBD004 61CBD004	-070 -070	700 02	A/B A/B	74A770002 74A770004
61CBD004 61CBD005	-070 -070	700 04	A/B A/B	74A770004 74A770002
61CBD005	-070 -070	700 02	A/B A/B	74A770002 74A770004
61CBD006	-070	700 04	A/B A/B	74A770004 74A770004
61CBD006	-070	705 04	В	74A770504
61CBD067	-070	700 04	A/B	74A770004
61CBD067	-070	705 04	В	74A770504
61CBD068	-070	700 02	A/B	74A770002
61CBD068	-070	700 02	A/B	74A770002
61CBD069	-070	700 02	A/B	74A770002
61CBD069	-070	700 04	A/B	74A770004
61CBD070	-070	700 02	A/B	74A770002
61CBD070	-070	700 04	A/B	74A770004
61CBD071	-070	700 04	A/B	74A770004
61CBD071	-070	705 04	В	74A770504
61CBD072	-070	700 02	A/B	74A770002
61CBD072	-070	700 04	A/B	74A770004
61CBD073	-070	700 02	A/B	74A770002
61CBD073	-070	700 04	A/B	74A770004
61CBD074	-070	700 02	A/B	74A770002
61CBD074	-070	700 04	A/B	74A770004
61CBD075	-070	700 04	A/B	74A770004
61CBD075	-070	705 04	В	74A770504

Page 64

REFERENCE	A1-F18AC-WRM	WORK PACKAGE	MODEL	ASSEMBLY
DESIGNATION	(VOLUME NUMBER)	NUMBER	MODEL	IDENTIFICATION
61CBD076	-070	700 02	A/B	74A770002
61CBD076	-070	700 04	A/B	74A770004
61CBD077	-070	700 02	A/B	74A770002
61CBD077	-070	700 04	A/B	74A770004
61CBD078	-070	700 02	A/B	74A770002
61CBD078	-070	700 04	A/B	74A770004
61CBD079	-070	700 04	A/B	74A770004
61CBD079	-070	705 04	В	74A770504
61CBD080	-070	700 02	A/B	74A770002
61CBD080	-070	700 04	A/B	74A770004
61CBD081	-070	700 02	A/B	74A770002
61CBD081	-070	700 04	A/B	74A770004
61CBD082	-070	700 02	A/B	74A770002
61CBD082	-070	700 04	A/B	74A770004
61CBD083	-070	700 04	A/B	74A770004
61CBD083	-070	705 04	В	74A770504
61CBD084	-070	700 02	A/B	74A770002
61CBD084	-070	700 04	A/B	74A770004
61CBD087	-070	700 02	A/B	74A770002
61CBD087	-070	700 04	A/B	74A770004
61CBD088	-070	700 02	A/B	74A770004 74A770002
61CBD088	-070	700 02	A/B A/B	74A770002 74A770004
61CBD089	-070	700 04	A/B A/B	74A770004 74A770002
61CBD089	-070	700 02	A/B A/B	74A770002 74A770004
61CBD090	-070	700 04	A/B	74A770004
61CBD090	-070	705 04	В	74A770504
61CBD130	-070	700 10	A/B	74A770010
61CBD131	-070	700 10	A/B	74A770010
61CBD134	-070	700 10	A/B	74A770010
61CBD135	-070	700 10	A/B	74A770010
61CBD136	-070	700 10	A/B	74A770010
61CBD146	-070	700 04	A/B	74A770004
61CBD146	-070	705 04	В	74A770504
61CBD149	-070	700 04	A/B	74A770004
61CBD149	-070	705 04	В	74A770504
61CBD156	-070	700 02	A/B	74A770002
61CBD156	-070	700 04	A/B	74A770004
61CBD157	-070	700 02	A/B	74A770002
61CBD157	-070	700 04	A/B	74A770004
61CBD158	-070	700 02	A/B	74A770002
61CBD158	-070	700 04	A/B	74A770004
61CBD159	-070	700 04	A/B	74A770004
61CBD159	-070	705 04	В	74A770504
61CBD221	-070	700 04	A/B	74A770004
61CBD221	-070	705 04	В	74A770504
61CRY293	-070	943 79	A/B	74R794379
61CRY295	-070	943 79	A/B	74R794379
61J-A120	-020	532 11	A	74A753211
61J-A120	-030	533 11	В	74A753311
61J-D245	-020	520 08	A/B	74A752008
61J-E013	-020	530 27	A	74A753027
61J-E018	-020	530 27	A/B	74A753027 74A753031
61J-E018	-070	945 42	A/B A	74R794542
61J-E025	-020	530 28	A/B	74A753028
	-020 -020	530 28		
61J-E166			A/B	74A753035
61J-E166	-070	945 41	A	74R794541
61J-E176	-070	945 43	A	74R794543
61J-F034	-020	532 20	A	74A753220

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
61J-F036	-020	530 33	A	74A753033
61J-F036	-070	945 37	A	74R794537
61J-F037	-020	530 34	A	74A753034
61J-F037	-070	945 38	A	74R794538
61J-F038	-020	530 38	A	74A753038
61J-F038	-070	945 40	A	74R794540
61J-F039	-020	530 37	A	74A753037
61J-F039	-070	945 39	A	74R794539
61J-J022C	-070	700 58	A/B	74A770058
61J-J033	-010	502 10	A	74A750210
61J-J033	-010	503 10	В	74A750310
61J-J035	-010	502 03	A	74A750203
61J-J035	-010	503 03	В	74A750303
61J-J040	-010	502 03	A	74A750203
61J-J040	-010	503 03	В	74A750303
61J-K237	-070	705 43	В	74A770543
61J-L217		705 43 705 54	В	74A770543 74A770554
61J-P013	-070		В	74A770334 74A760113
	-050	601 13		
61J-P110A	-050	602 05	A/B	74A760205
61J-P110B	-050	602 05	A/B	74A760205
61J-P110B	-050	602 07	A/B	74A760207
61J-P110C	-050	600 25	A/B	74A760025
61J-R034	-060	603 30	В	74A760330
61J-R036	-050	601 19	В	74A760119
61J-R037	-050	601 18	В	74A760118
61J-R038	-050	601 20	В	74A760120
61J-R039	-050	601 17	В	74A760117
61J-R111A	-050	602 07	A/B	74A760207
61J-R111B	-050	602 07	A/B	74A760207
61J-U027	-040	542 01	A/B	74A754201
61J-U027	-070	945 45	A	74R794545
61J-U041	-040	542 04	A/B	74A754204
61J-U045	-040	542 12	A/B	74A754212
61J-V026	-040	552 01	A/B	74A755201
61J-V026	-070	945 46	A	74R794546
61J-V042	-040	552 04	A/B	74A755204
61J-V046	-040	552 12	A/B	74A755212
61J-W024	-040	562 09	A/B	74A756209
61J-W093	-040	562 05	A/B	74A756205
61J-W093	-040	562 14	A/B	74A756214
61J-W093	-070	943 49	A/B	74R794349
61J-W095A	-070	701 47	A/B	68A770147
61J-W095B	-070	701 57	A/B	74A770157
61J-W095B	-070	701 83	A/B A/B	68A770183
61J-W095B	-070	943 78	A/B A/B	74R794378
	-040	562 05		
61J-W096			A/B	74A756205
61J-W096	-040	562 14	A/B	74A756214
61J-W102	-040	562 06	A/B	74A756206
61J-W106	-040	562 08	A/B	74A756208
61J-W112	-040	562 05	A/B	74A756205
61J-W112	-040	562 14	A/B	74A756214
61J-W112	-070	943 49	A/B	74R794349
61J-W210	-070	701 47	A/B	68A770147
61J-W215	-070	701 47	A/B	68A770147
61J-W239	-070	701 47	A/B	68A770147
61J-W253	-070	701 83	A/B	68A770183
61J-W254	-070	701 83	A/B	68A770183
61J-W258	-040	562 13	A/B	74A756213

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
61J-Y200A	-070	701 43	A/B/A/B	74A770143
61J-Y200A	-070	701 86	A/B	74A770186
61J-Y200B	-070	701 41	A/B/A/B	74A770141
61J-Y200B	-070	701 42	A/B/A/B	74A770142
61J-Y200B	-070	701 81	A/B	74A770181
61J-Y200B	-070	701 82	A/B	74A770182
61J-Y204	-070	701 51	A/B/A/B	74A770151
61J-Y206	-070	701 41	A/B/A/B	74A770141
61J-Y206	-070	701 42	A/B/A/B	74A770142
61J-Y206	-070	701 81	A/B	74A770181
61J-Y206	-070	701 82	A/B	74A770182
61J-Y287	-070	943 78	A/B	74R794378
61K-C121	-070	700 05	A	74A770005
61K-C121	-070	705 05	В	74A770505
61K-C122	-070	700 05	A/B	74A770005
61K-C122	-070	705 05	В	74A770505
61K-C123	-070	700 05	A/B	74A770005
61K-C123	-070	705 05	В	74A770505
61K-C124	-070	700 05	A	74A770005
61K-C124	-070	705 05	В	74A770003
61K-C132	-070	700 05	A	74A770005
61K-C132	-070	705 05	B	74A770003 74A770505
61K-C132	-070	700 05		74A770303
			A	
61K-C133	-070	705 05	В	74A770505
61K-C141	-070	700 05	A	74A770005
61K-C141	-070	705 05	В	74A770505
61K-C142	-070	700 05	A/B	74A770005
61K-C142	-070	705 05	В	74A770505
61K-C151	-070	700 05	A	74A770005
61K-C151	-070	705 05	В	74A770505
61K-C219	-070	705 05	В	74A770505
61K-C220	-070	705 05	В	74A770505
61K-F125	-070	700 06	A	74A770006
61K-F125	-070	705 06	В	74A770506
61K-F126	-070	700 06	A	74A770006
61K-F126	-070	705 06	В	74A770506
61K-F127	-070	700 06	A	74A770006
61K-F127	-070	705 06	В	74A770506
61K-F128	-070	700 06	A	74A770006
61K-F128	-070	705 06	В	74A770506
61K-F129	-070	700 06	A	74A770006
61K-F129	-070	705 06	В	74A770506
61K-F137	-070	700 06	A	74A770006
61K-F137	-070	705 06	В	74A770506
61K-F138	-070	700 06	A	74A770006
61K-F138	-070	705 06	В	74A770506
61K-F147	-070	700 06	A	74A770006
61K-F147	-070	705 06	В	74A770506
61K-F150	-070	700 06	A	74A770006
61K-F150	-070	705 06	В	74A770506
61K-F155	-070	700 06	A	74A770006
61K-F155	-070	705 06	В	74A770506
61K-F160	-070	700 06	A	74A770006
61K-F160	-070	705 06	В	74A770506
61K-W211	-070	701 47	A/B	68A770147
61K-W224	-070	701 47	A/B A/B	74A770157
61K-W224	-070	701 37	A/B A/B	68A770183
01IX- II 22T	-070	701 03	11/19	00/1//0103

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
61K-W225	-070	701 57	A/B	74A770157
61K-W225	-070	701 83	A/B	68A770183
61K-W226	-070	701 57	A/B	74A770157
61K-W226	-070	701 83	A/B	68A770183
61K-W227	-070	701 57	A/B	74A770157
61K-W227	-070	701 83	A/B	68A770183
61K-W228	-070	701 57	A/B	74A770157
61K-W228	-070	701 83	A/B	68A770183
61K-W229	-070	701 57	A/B	74A770157
61K-W229	-070	701 83	A/B	68A770183
61K-W240	-070	701 47	A/B	68A770147
61K-W249	-040	562 13	A/B	74A756213
61K-W250	-040	562 13	A/B	74A756213
61K-W255	-070	701 83	A/B	68A770183
61K-W256	-070	701 83	A/B	68A770183
61K-W257	-070	701 83	A/B A/B	68A770183
61K-W263	-070	701 83	A/B A/B	68A770183
61K-W264	-070	701 83 701 47	A/B A/B	68A770147
61K-W204 61K-Y202	-070	701 47	A/B A/B/A/B	74A770144
61K-Y202	-070		A/B/A/B	
61K-Y202 61K-Y288	-070 -070	701 85 943 79	A/B A/B	74A770185 74R794379
				74R794379 74R794379
61K-Y289	-070	943 79	A/B	
61K-Y290	-070	943 79	A/B	74R794379
61K-Y291	-070	943 79	A/B	74R794379
61K-Y292	-070	943 79	A/B	74R794379
61L-W241	-070	701 64	A/B	74A770164
61P-A020A	-020	532 11	A	74A753211
61P-A020A	-030	533 11	В	74A753311
61P-A020B	-020	532 11	A	74A753211
61P-A020B	-030	533 11	В	74A753311
61P-A246A	-020	532 11	A	74A753211
61P-A246A	-030	533 11	В	74A753311
61P-A246B	-020	532 11	A	74A753211
61P-A246B	-030	533 11	В	74A753311
61P-A246C	-020	520 08	A/B	74A752008
61P-B164	-020	532 11	A	74A753211
61P-B164	-030	533 11	В	74A753311
61P-B184	-020	532 16	A	74A753216
61P-B184	-030	533 16	В	74A753316
61P-B185	-020	532 16	A	74A753216
61P-B185	-030	533 16	В	74A753316
61P-D033	-020	532 20	A	74A753220
61P-D033	-030	533 20	В	74A753320
61P-D035	-020	530 36	A/B	74A753036
61P-D040	-020	530 32	A/B	74A753032
61P-E009A	-020	532 19	A	74A753219
61P-E009A	-030	533 19	В	74A753319
61P-E009B	-020	530 24	A/B	74A753024
61P-E013	-020	531 27	В	74A753127
61P-E013	-050	600 13	A	74A760013
61P-E018	-050	600 22	A/B	74A760022
61P-E025	-050	600 21	A/B	74A760021
61P-E047A	-020	530 24	A/B	74A753024
61P-E047B	-020	530 27	A	74A753027
61P-E047B	-020	531 27	В	74A753127
61P-E047C	-020	530 28	A/B	74A753028
61P-E166	-050	600 25	A/B	74A760025
61P-F001A	-020	532 14	A	74A753214

	REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
	61P-F001A	-030	533 14	В	74A753314
	61P-F001B	-020	532 14	A	74A753214
	61P-F001B	-030	533 14	В	74A753314
	61P-F001B	-070	943 68	A/B	74R794368
	61P-F001B	-070	943 69	A/B	74R794369
	61P-F001C	-020	530 32	A/B	74A753032
	61P-F001D	-020	530 33	A	74A753033
	61P-F001D	-020	531 33	В	74A753133
	61P-F001D	-070	945 37	A	74R794537
	61P-F001E	-020	530 34	A	74A753034
	61P-F001E	-020	531 34	В	74A753134
	61P-F001E	-070	945 38	A	74R794538
	61P-F001F	-020	530 35	A/B	74A753035
	61P-F001F	-070	945 41	A	74R794541
	61P-F001G	-020	530 36	A/B	74A753036
	61P-F001H	-020	530 37	A	74A753037
	61P-F001H	-020	531 37	В	74A753137
J	61P-F001H	-070	945 39	A	74R794539
	61P-F001J	-020	530 38	A	74A753038
	61P-F001J	-020	531 38	В	74A753138
J	61P-F001J	-070	945 40	A	74R794540
	61P-F001K	-020	530 31	A/B	74A753031
	61P-F001K	-070	945 42	A	74R794542
	61P-F001M	-070	945 43	A	74R794543
	61P-F010A	-020	532 14	A	74A753214
	61P-F010A	-030	533 14	В	74A753314
	61P-F010B	-020	532 14	A	74A753214
	61P-F010B	-030	533 14	В	74A753314
	61P-F034	-030	533 20	В	74A753320
	61P-F034	-060	602 30	A	74A760230
	61P-F036	-020	531 33	В	74A753133
	61P-F036	-050	600 19	A	74A760019
	61P-F036	-070	945 37	A	74R794537
	61P-F037	-020	531 34	В	74A753134
	61P-F037	-050	600 18	A	74A760018
	61P-F038	-020	531 38	В	74A753138
	61P-F038	-050	600 20	A	74A760020
	61P-F039	-020	531 37	В	74A753137
	61P-F039	-050	600 17	A	74A760017
	61P-G165	-020	532 06	A	74A753206
	61P-G165	-030	533 06	В	74A753306
	61P-G244	-020	530 42	A/B	74A753042
	61P-G245	-020	530 42	A/B	74A753042
	61P-J022A	-010	502 10	A	74A750210
	61P-J022A	-010	503 10	В	74A750310
	61P-J022B	-010	502 10	A	74A750210
	61P-J022B	-010	503 10	В	74A750310
	61P-J022C	-010	502 10	A	74A750210
	61P-J022C	-010	503 10	В	74A750310
J	61P-K237	-010	503 01	В	74A750301
	61P-L217	-010	503 01	В	74A750301
J	61P-P014A	-060	602 31	A/B	74A760231
	61P-P014B	-060	602 31	A/B	74A760231
	61P-P014B	-070	986 22	A	74R798622
	61P-P014B	-070	986 25	A	74R798625
	61P-P014C	-050	602 11	A/B	74A760211
	61P-P028A	-050	600 13	A	74A760013
	61P-P028A	-050	601 13	В	74A760113
L		I		I	<u> </u>

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
61P-P028B	-050	600 15	A/B	74A760015
61P-P028C	-050	600 14	A/B	74A760014
61P-R016A	-060	602 33	A/B	74A760233
61P-R016A	-070	986 12	A/B	74R798612
61P-R016B	-060	602 33	A/B	74A760233
61P-R016B	-070	986 22	A	74R798622
61P-R016B	-070	986 26	A	74R798626
61P-R016C	-050	602 12	A/B	74A760212
61P-R162	-050	600 21	A/B	74A760021
61P-R167	-050	602 07	A/B	74A760207
61P-R168	-050	600 22	A/B	74A760022
61P-U011A	-040	542 09	A/B	74A754209
61P-U011B	-040	542 09	A/B A/B	74A754209
61P-U021A	-040	542 15	A/B A/B	74A754205 74A754215
61P-U027	-050	600 19		74A754213 74A760019
			A	
61P-U027	-050	601 19	B	74A760119
61P-U030A	-050	600 14	A/B	74A760014
61P-U030B	-04U	542 01	A/B	74A754201
61P-U030C	-040	542 04	A/B	74A754204
61P-U041	-050	600 18	A	74A760018
61P-U041	-050	601 18	В	74A760118
61P-U045	-060	602 30	A	74A760230
61P-U045	-060	603 30	В	74A760330
61P-U265	-070	945 45	A	74R794545
61P-V019A	-040	552 09	A/B	74A755209
61P-V019B	-040	552 09	A/B	74A755209
61P-V026	-050	600 17	A	74A760017
61P-V026	-050	601 17	В	74A760117
61P-V029A	-040	552 15	A/B	74A755215
61P-V031A	-050	600 15	A/B	74A760015
61P-V031B	-040	552 01	A/B	74A755201
61P-V031C	-040	552 04	A/B	74A755204
61P-V042	-050	600 20	A	74A760020
61P-V042	-050	601 20	В	74A760120
61P-V046	-060	602 30	A	74A760230
61P-V046	-060	603 30	В	74A760330
61P-V266	-070	945 46	A	74R794546
61P-W012A	-040	562 05	A/B	74A756205
61P-W012A	-040	562 14	A/B	74A756214
61P-W012A	-070	943 48	A/B	74R794348
61P-W012C	-040	562 05	A/B A/B	74A756205
61P-W012C	-040	562 14	A/B A/B	74A756214
61P-W012C	-040	943 49	A/B A/B	74R794349
61P-W012C	-070	562 05	A/B A/B	74R794349 74A756205
61P-W012D	-040	562 03 562 14	A/B A/B	74A756214
	-040 -070			74A756214 74R794349
61P-W012D	-070 -040	943 49	A/B	
61P-W021A		542 15 562 05	A A/D	74A754215
61P-W023A	-040	562 05	A/B	74A756205
61P-W023A	-040	562 14	A/B	74A756214
61P-W023B	-040	562 09	A/B	74A756209
61P-W023C	-040	562 05	A/B	74A756205
61P-W023C	-040	562 14	A/B	74A756214
61P-W093	-040	562 29	A/B	74A756229
61P-W093	-040	562 35	A/B	68A756235
61P-W093	-040	562 36	A/B	68A756236
61P-W093	-040	562 45	A/B	68A756245
61P-W093	-040	562 47	A/B	74A756247
61P-W094A	-040	562 05	A/B	74A756205

	REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
1	61P-W094A	-040	562 14	A/B	74A756214
•	61P-W094B	-040	562 06	A/B	74A756206
	61P-W094C	-040	562 07	A/B	74A756207
	61P-W095A	-040	562 29	A/B	74A756229
	61P-W095A	-040	562 35	A/B	68A756235
	61P-W095B	-040	562 29	A/B	74A756229
	61P-W095B	-040	562 35	A/B	68A756235
	61P-W096	-040	562 27	A/B	68A756227
	61P-W097A	-040	562 05	A/B	74A756205
	61P-W097A	-040	562 14	A/B	74A756214
'	61P-W097A	-070	943 48	A/B	74R794348
	61P-W097B	-040	562 07	A/B	74A756207
	61P-W097E	-040	562 08	A/B	74A756208
	61P-W098R	-040	562 28	A/B	74A756228
	61P-W099A	-040	562 27	A/B	68A756227
	61P-W102	-040	562 27	A/B	68A756227
	61P-W112	-040	562 27	A/B	68A756227
	61P-W112	-040	562 28	A/B	74A756228
	61P-W112	-040	562 35	A/B	68A756235
	61P-W112	-040	562 36	A/B	68A756236
	61P-W112	-040	562 45	A/B	68A756245
	61P-W112	-040	562 47	A/B	74A756247
•	61P-W209	-070	701 47	A/B	68A770147
	61P-W212	-070	701 57	A/B	74A770157
	61P-W212	-070	701 83	A/B	68A770183
	61P-W213	-070	701 57	A/B	74A770157
	61P-W213	-070	701 83	A/B	68A770183
	61P-W214C	-070	701 47	A/B	68A770147
	61P-W214C	-070	943 78	A/B	74R794378
	61P-W239	-070	701 64	A/B	74A770164
	61P-W251	-040	562 36	A/B	68A756236
	61P-W258	-040	562 05	A/B	74A756205
	61P-W258	-040	562 14	A/B	74A756214
•	61P-W258	-070	943 48	A/B	74R794348
	61P-W271R	-040	562 45	A/B	68A756245
	61P-Y096	-040	562 25	A/B	68A756225
	61P-Y096	-040	562 47	A/B	74A756247
'	61P-Y100A	-040	562 26	A/B	74A756226
	61P-Y100A	-040	562 32	A/B	74A756232
	61P-Y100B	-040	562 26	A/B	74A756226
	61P-Y100B	-040	562 32	A/B	74A756232
	61P-Y101	-040	562 25	A/B	68A756225
	61P-Y102	-040	562 26	A/B	74A756226
	61P-Y102	-040	562 32	A/B	74A756232
	61P-Y106	-040	562 25	A/B	68A756225
	61P-Y112	-040	562 25	A/B	68A756225
	61P-Y112	-040	562 26	A/B	74A756226
	61P-Y112	-040	562 30	A/B	74A756230
	61P-Y112	-040	562 32	A/B	74A756232
	61P-Y112	-040	562 34	A/B	74A756234
	61P-Y203	-070	701 41	A/B/A/B	74A770141
	61P-Y203	-070	701 42	A/B/A/B	74A770142
	61P-Y203	-070	701 81	A/B	74A770181
	61P-Y203	-070	701 82	A/B	74A770182
	61P-Y205	-070	701 41	A/B/A/B	74A770141
	61P-Y205	-070	701 42	A/B/A/B	74A770142
	61P-Y205	-070	701 81	A/B	74A770181

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
61P-Y205	-070	701 82	A/B	74A770182
61P-Y247A	-040	562 34	A/B	74A756234
61P-Y252	-070	701 81	A/B	74A770181
61P-Y252	-070	701 82	A/B	74A770182
61P-Y285	-040	562 47	A/B	74A756247
61P-Y287	-070	943 79	A/B	74R794379
61P-Z105A	-050	602 10	A/B	68A760210
61P-Z105B	-050	600 01	A/B	74A760001
61P-Z162	-050	600 01	A/B	74A760001
61P-Z167	-050	602 10	A/B	68A760210
61S-C163	-070	701 35	A/B	74A770135
61S-G153	-070	701 36	A/B	74A770136
61S-H007	-070	700 11	A	74A770011
61S-H007	-070	705 11	В	74A770511
61S-H008	-070	700 11	A	74A770011
61S-H008	-070	705 11	В	74A770511
61S-H032	-070	700 13	A/B	74A770013
61S-H139	-070	700 29	A/B	74A770029
61S-H152	-070	700 11	A	74A770011
61S-H152	-070	705 11	В	74A770511
61S-H177	-010	502 01	A	74A750201
61S-H177	-010	503 01	В	74A750301
61S-J140	-070	700 12	A/B	74A770012
61S-J222	-070	700 12	A/B A/B	74A770012 74A770020
61S-J223	-070	700 20	A/B A/B	74A770020
61S-K238	-070	705 43	B B	74A770543
61S-L216	-070	705 54	В	74A770554
61SQY201A	-070	703 54	A/B/A/B	74A770150
61SQY201B	-070	701 50	A/B/A/B A/B/A/B	74A770150 74A770150
61X-D161	-070	532 14	A/B/A/B A	74A770130 74A753214
	-020	533 14	В	
61X-D161	-070	943 68	A/B	74A753314 74R794368
61X-D161	-070	943 68	A/B A/B	
61X-D161				74R794369
62CBC001	-070	700 05	A	74A770005
62CBC001	-070	705 05	В	74A770505
62CBC002	-070	700 05	A	74A770005
62CBC002	-070	705 05	В	74A770505
62CBC003	-070	700 05	A	74A770005
62CBC003	-070	705 05	В	74A770505
62CBC004	-070	700 05	A	74A770005
62CBC004	-070	705 05	В	74A770505
62CBC005	-070	700 05	A	74A770005
62CBC005	-070	705 05	В	74A770505
62J-A030E	-020	532 11	A	74A753211
62J-A030E	-020	532 14	A	74A753214
62J-A030E	-030	533 11	В	74A753311
62J-B029E	-020	532 16	A	74A753216
62J-B029E	-030	533 16	В	74A753316
62J-J007	-010	502 01	A	74A750201
62J-J007	-010	503 01	В	74A750301
62K-C031	-070	700 05	A	74A770005

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
62K-C031	-070	705 05	В	74A770505
62K-C032	-070	700 05	A	74A770005
62K-C032	-070	705 05	В	74A770505
62P-A013A	-020	532 11	A	74A753211
62P-A013A	-030	533 11	В	74A753311
62P-A030E	-070	701 71	A/B	74A770171
62P-B010A	-020	532 16	A	74A753216
62P-B010A	-030	533 16	В	74A753316
62P-B014A	-020	522 03	A/B	74A752203
62P-B029E	-070	701 70	A/B	74A770170
62P-E006A	-020	532 16	A	74A753216
62P-E006A	-030	533 16	В	74A753316
62P-E006B	-020	532 17	A	74A753217
62P-E006B	-030	533 17	В	74A753317
62P-E006C	-020	532 16	A	74A753216
62P-E006C	-030	533 16	В	74A753316
62P-E009K	-020	532 16	A	74A753216
62P-E009K	-030	533 16	В	74A753316
62P-E009L	-020	532 16	A	74A753216
62P-E009L	-030	533 16	В	74A753316
62P-E009M	-020	532 16	A	74A753216
62P-E009M	-030	533 16	В	74A753316
62P-J008	-010	502 02	A	74A750202
62P-J008	-010	503 02	В	74A750302
62P-L027	-010	503 02	В	74A750302
62P-S012A	-060	602 26	A	74A760226
62P-S012A	-060	603 26	В	74A760326
62P-T011A	-060	602 26	A	74A760226
62P-T011A	-060	603 26	В	74A760326
62S-A030	-070	701 71	A/B	74A770171
62S-B029	-070	701 70	A/B	74A770170
62S-H033	-070	700 29	A/B	74A770029
62S-S036	-060	602 26	A	74A760226
62S-S036	-060	603 26	В	74A760326
62S-S036	-070	702 00	A/B	74A770200
62S-T035	-060	602 26	A A	74A770200 74A760226
62S-T035	-060	603 26	В	74A760326
62S-T035	-070	702 00	A/B	74A770200
64CBC011	-070	702 00	A/B A	74A770200 74A770005
64CBC011	-070	705 05	B	74A770505
64CBC012	-070	700 05	A A	74A770005
64CBC012	-070	705 05	В	74A770505
64CBC013	-070	700 05	A A	74A770005
64CBC013	-070	705 05	В	74A770505
64CBC016	-070	703 03		74A770303 74A770005
64CBC016	-070 -070	700 05 705 05	A B	74A770005 74A770505
64J-E001F			A/B	
	-040 070	562 33 700 05		74A756233
64K-C015	-070 -070	700 05 705 05	A	74A770005
64K-C015			В	74A770505
64K-C024	-070	700 05	A	74A770005
64K-C024	-070	705 05	В	74A770505
64P-E001A	-020	532 17	A	74A753217
64P-E001A	-030	533 17	В	74A753317
64P-E001B	-020	532 17	A	74A753217
64P-E001B	-030	533 17	В	74A753317
64P-E001F	-020	532 17	A	74A753217
64P-E001F	-030	533 17	В	74A753317
64P-E001G	-020	532 17	A	74A753217

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
64P-E001G	-030	533 17	В	74A753317
64P-E001G	-040	562 33	A/B	74A756233
64P-E001Q	-020	532 17	A	74A753217
64P-E001Q	-030	533 17	В	74A753317
64S-H014	-070	700 29	A/B	74A770029
65CBD024	-070	700 02	A/B	74A770002
65CBD024	-070	700 04	A/B	74A770004
65CBD024	-070	705 04	В	74A770504
65CBD025	-070	700 02	A/B	74A770002
65CBD025	-070	700 04	A/B	74A770004
65CBD025	-070	705 04	В	74A770504
65J-P004	-060	602 24	A/B	74A760224
65J-R005	-060	602 23	A/B	74A760223
65K-F026	-070	700 06	A	74A770006
65K-F026	-070	705 06	В	74A770506
65M-H009	-070	700 29	A/B	74A770029
65M-H010	-070	700 29	A/B A/B	74A770029
65M-H011	-070	700 29	A/B A/B	74A770029 74A770029
			В	
65P-K003	-010	503 01		74A750301
65P-L003	-010	502 01	A	74A750201
65P-P001A	-050	602 07	A/B	74A760207
65P-P001A	-060	602 24	A/B	74A760224
65P-P001B	-050	602 07	A/B	74A760207
65P-P001B	-060	602 24	A/B	74A760224
65P-R002A	-050	602 07	A/B	74A760207
65P-R002A	-060	602 23	A/B	74A760223
65P-R002B	-050	602 07	A/B	74A760207
65P-R002B	-060	602 23	A/B	74A760223
65S-H006	-070	700 29	A/B	74A770029
65S-H007	-070	700 29	A/B	74A770029
65S-H027	-010	502 01	A	74A750201
65S-H027	-010	503 01	В	74A750301
66CBD002	-070	700 02	A/B	74A770002
66CBD002	-070	700 04	A/B	74A770004
66J-C004	-020	532 17	A	74A753217
66J-C004	-030	533 17	В	74A753317
66P-C004	-020	532 11	A	74A753211
66P-C004	-030	533 11	В	74A753311
66P-F001A	-020	532 17	A	74A753311 74A753217
66P-F001A	-030	532 17	В	74A753217 74A753317
66P-F001B	-020	532 16	A	74A753216
66P-F001B	-030	533 16	В	74A753316
66P-F001C	-020	532 16	A	74A753216
66P-F001C	-030	533 16	В	74A753316
66P-F001D	-020	532 14	A	74A753214
66P-F001D	-030	533 14	В	74A753314
67CBD003	-070	700 02	A/B	74A770002
67P-J002	-010	502 02	A	74A750202
67P-J002	-010	503 02	В	74A750302
67P-T001A	-060	602 25	A	74A760225
67P-T001A	-060	603 25	В	74A760325
67P-T001E	-060	602 25	A	74A760225
67P-T001E	-060	603 25	В	74A760325
67P-T001G	-060	602 25	A	74A760225
67P-T001G	-060	603 25	В	74A760325
68CBC006	-070	700 05	A	74A770005
68CBC006	-070	705 05	В	74A770505
68CBC007	-070	700 05	A	74A770005

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
68CBC007	-070	705 05	В	74A770505
68CBC008	-070	700 05	A	74A770005
68CBC008	-070	705 05	В	74A770505
68CBC009	-070	700 42	A	74A770042
68CBC009	-070	705 42	В	74A770542
68CBD005	-070	700 02	A/B	74A770002
68P-E001A	-020	532 19	A	74A753219
68P-E001A	-030	533 19	В	74A753319
68P-E001C	-020	532 19	A	74A753219
68P-E001C	-030	533 19	В	74A753319
68S-J010	-070	700 20	A/B	74A770020
69CBD004	-070	700 02	A/B	74A770002
69CBD004	-070	700 04	A/B	74A770004
69J-F007	-020	530 03	Α	74A753003
69J-R007	-050	601 11	В	74A760111
69K-F009	-070	700 06	A	74A770006
69K-F009	-070	705 06	В	74A770506
69P-F001B	-020	532 16	A	74A770300 74A753216
69P-F001B	-030	533 16	В	74A753216 74A753316
69P-F001C	-020	532 14	A	74A753214
69P-F001C	-030	533 14	В	74A753314
69P-F001E	-020	530 03	A	74A753003
69P-F001E	-020	531 03	В	74A753103
69P-F001F	-020	530 02	A/B	74A753103 74A753002
69P-F007	-020	531 03	В	74A753103
69P-F007	-020	600 11	A	74A753103 74A760011
69P-F008A	-030	530 02	A/B	74A753002
69P-F008B	-020	530 02	A/B A/B	74A753002 74A753029
69P-R006	-020 -050	600 11		74A753029 74A760011
			A B	
69P-R006	-050	601 11	A/B	74A760111
7A-S048 7CBC002	-070 -070	702 02 700 05	· ·	74A770202
7CBC002 7CBC002	-070	705 05	A	74A770005
7CBC002 7CBC005	-070	703 03	В	74A770505
	-070 -070	700 05 705 05	A	74A770005
7CBC005			В	74A770505
7CBC012	-070	700 05	A	74A770005
7CBC012	-070	705 05	В	74A770505
7CBC029	-070	700 05	A	74A770005
7CBC029	-070	705 05	В	74A770505
7CBC035	-070	700 05	A	74A770005
7CBC035	-070	705 05	B	74A770505
7DSA015	-070	701 06	A/B	74A770106
7DSB017	-070	701 07	A/B	74A770107
7DSM007	-040	542 16	A/B	74A754216
7DSN008	-040	552 13	A/B	74A755213
7DSS023	-070	702 00	A/B	74A770200
7DSS030	-070	702 00	A/B	74A770200
7DST025	-070	702 00	A/B	74A770200
7DST031	-070	702 00	A/B	74A770200
7DSU011	-070	701 05	A/B	74A770105
7DSU019	-070	701 08	A/B	74A770108
7DSU049	-070	701 52	A/B	74A770152
7DSV010	-070	701 04	A/B	74A770104
7DSV021	-070	701 09	A/B	74A770109
7DSV050	-070	701 53	A/B	74A770153
7E-A014	-020	532 11	A	74A753211
7E-A014	-030	533 11	В	74A753311
7E-A014	-070	701 06	A/B	74A770106

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
7E-B016	-020	532 16	A	74A753216
7E-B016	-030	533 16	В	74A753316
7E-B016	-070	701 07	A/B	74A770107
7E-U018	-070	701 08	A/B	74A770108
7E-U018	-070	701 52	A/B	74A770152
7E-U018	-070	701 66	A/B	74A770166
7E-V020	-070	701 09	A/B	74A770109
7E-V020	-070	701 53	A/B	74A770153
7E-V020	-070	701 67	A/B	74A770167
7FLS044	-060	602 26	A	74A760226
7FLS044	-060	603 26	В	74A760326
7FLS044	-070	702 00	A/B	74A770200
7FLS046	-060	602 26	A	74A760226
7FLS046	-060	603 26	В	74A760326
7FLS046	-070	702 00	A/B	74A770200
7FLT045	-060	602 25	A	74A760225
7FLT045	-060	603 25	В	74A760325
7FLT045	-070	702 00	A/B	74A770200
7FLT047	-060	602 25	A	74A760225
7FLT047	-060	603 25	В	74A760325
7FLT047	-070	702 00	A/B	74A770200
7FLU053	-070	701 66	A/B	74A770166
7FLV054	-070	701 67	A/B	74A770167
7J-S048	-070	702 02	A/B	74A770202
7J-U042	-040	542 09	A/B	74A754209
7J-V043	-040	552 09	A/B	74A755209
7K-C004	-070	700 05	A	74A770005
7K-C004	-070	705 05	В	74A770505
7K-C040	-070	700 05	A	74A770005
7K-C040	-070	705 05	В	74A770505
7P-G026	-020	532 13	A/B	74A753213
7P-K032	-010	503 01	В	74A750301
7P-L032	-010	502 01	A	74A750201
7P-S036A	-060	602 26	A	74A760226
7P-S036A	-060	603 26	В	74A760326
7P-S036B	-060	612 05	A/B	74A761205
7P-S036C	-060	612 06	A/B	74A761206
7P-S037	-060	612 06	A/B	74A761206
7P-S048	-060	612 09	A/B	74A761209
7P-T009	-060	612 11	A/B	74A761211
7P-T038	-060	612 05	A/B	74A761205
7R-H006	-070	700 19	A/B	74A770019
7R-H013	-070	700 19	A/B	74A770019
7S-H028	-070	700 13	A/B	74A770013
7S-H041	-070	700 19	A/B	74A770019
7T-T039	-060	602 25	A	74A760225
7T-T039	-060	603 25	В	74A760325
7T-T039	-060	612 11	A/B	74A761211
7TBS048	-070	702 02	A/B	74A770202
70CBD006	-070	700 02	A/B	74A770002
70CBD006	-070	700 04	A/B	74A770004
70J-A003	-020	532 11	A	74A753211
70J-A003	-030	533 11	В	74A753311
70J-B004	-020	532 16	A	74A753216
70J-B004	-030	533 16	В	74A753316
70P-E005	-020 -030	532 19 533 19	A	74A753219
70P-E005 70P-F001A	-030 -020	533 19 532 16	B A	74A753319 74A753216
/UF-FUU1A	-020	332 10	Α	/4A/33210

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
70P-F001A	-030	533 16	В	74A753316
70P-F001B	-020	532 16	A	74A753216
70P-F001B	-030	533 16	В	74A753316
70P-F001B	-070	943 63	A/B	74R794363
71CBD002	-070	700 02	A/B	74A770002
71CBD003	-070	700 02	A/B	74A770002
71CBD003	-070	700 04	A/B	74A770004
71CBD003	-070	705 04	В	74A770504
71J-B004	-020	530 06	A/B	74A753006
71J-F006	-020	530 40	A/B	74A753040
71P-B001A	-020	520 03	A/B	74A752003
71P-B001B	-020	522 03	A/B	74A752203
71P-B004	-020	520 03	A/B	74A752003
71P-F006	-020	530 06	A/B A/B	74A753006
	-070	700 04	A/B A/B	
72CBD007			· ·	74A770004
72CBD007	-070	705 04	В	74A770504
72J-B009	-020	532 14	A	74A753214
72J-B009	-030	533 14	В	74A753314
72K-F005	-070	700 06	A	74A770006
72K-F005	-070	705 06	В	74A770506
72K-F006	-070	700 06	A	74A770006
72K-F006	-070	705 06	В	74A770506
72P-A002A	-020	520 04	A/B	74A752004
72P-A002B	-020	522 03	A/B	74A752203
72P-A002D	-020	522 03	A/B	74A752203
72P-A002F	-020	522 03	A/B	74A752203
72P-A002G	-020	522 03	A/B	74A752203
72P-B001A	-020	522 03	A/B	74A752203
72P-B004	-020	520 04	A/B	74A752004
	-020	522 03	A/B A/B	
72P-B009				74A752203
74CBC003	-070	700 05	A	74A770005
74CBC003	-070	705 05	В	74A770505
74CBC004	-070	700 05	A	74A770005
74CBC004	-070	705 05	В	74A770505
74CBC005	-070	700 05	A	74A770005
74CBC005	-070	705 05	В	74A770505
74CBC006	-070	700 05	A	74A770005
74CBC006	-070	705 05	В	74A770505
74J-B007	-020	530 05	A/B	74A753005
74J-B008	-020	530 04	A/B	74A753004
74K-F09	-070	700 06	A	74A770006
74K-F009	-070	705 06	В	74A770506
74K-F010	-070	700 06	A	74A770006
74K-F010	-070	705 06	В	74A770506
74P-B001A	-020	522 03	A/B	74A752203
74P-B001R	-020	520 01	A/B	74A752001
74P-B001B	-020	520 02	A/B A/B	74A752001 74A752002
74P-B007	-020	520 02	A/B A/B	74A752002 74A752001
74P-B007 74P-B008	-020	520 01	A/B A/B	74A752001 74A752002
74P-F002A	-020	532 16	A	74A753216
74P-F002A	-030	533 16	В	74A753316
74P-F002B	-020	532 16	A	74A753216
74P-F002B	-030	533 16	В	74A753316
74P-F002D	-020	530 05	A/B	74A753005
74P-F002F	-020	530 04	A/B	74A753004
75J-N001	-040	552 13	A/B	74A755213
75R-J008	-070	700 30	A/B	74A770030
75R-J009	-070	700 30	A/B	74A770030

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
75R-J010	-070	700 30	A/B	74A770030
75R-J011	-070	700 30	A/B	74A770030
75R-J012	-070	700 30	A/B	74A770030
76ATB017	-070	700 22	A/B	74A770022
76CBC027	-070	700 42	A	74A770042
76CBC027	-070	705 42	В	74A770542
76CBD014	-070	700 04	A/B	74A770004
76CBD014	-070	705 04	В	74A770504
76CBD015	-070	700 10	A/B	74A770010
76CBD025	-070	700 02	A/B	74A770002
76CBD025	-070	700 04	A/B	74A770004
76CBD025	-070	705 04	В	74A770504
76CBD030	-070	700 04	A/B	74A770004
76CBD030	-070	705 04	В	74A770504
76J-B018	-020	530 12	A/B	74A753012
76J-B023A	-070	700 22	A/B	74A770022
76J-B023B	-070	700 22	A/B	74A770022
76J-F005	-020	530 39	A/B	74A753039
76J-F019	-020	530 14	A	74A753014
76J-F029	-020	530 09	A/B	74A753009
76J-H016	-010	502 11	A/B A	74A75007
76J-H016	-010	503 11	В	74A750311
76J-J003	-010	502 11	A	74A750211
76J-J003	-010	503 11	В	74A750311
76J-K031	-010	503 11	В	74A750311
76J-K032	-070	705 50	В	74A770550
76J-L028	-010	503 05	В	74A750305
76J-R019	-050	601 16	В	74A760116
76P-B003	-020	522 05	A/B	74A752205
76P-B011A	-020	520 06	A/B	74A752006
76P-B011B	-020	520 07	A/B	74A752007
76P-B018	-020	520 06	A/B	74A752006
76P-B023A	-020	522 05	A/B	74A752205
76P-F001A	-020	530 07	A/B	74A753007
76P-F001B	-020	532 16	A	74A753216
76P-F001B	-030	533 16	В	74A753316
76P-F001E	-020	532 16	A	74A753216
76P-F001E	-030	533 16	В	74A753316
76P-F001G	-020	532 17	A	74A753217
76P-F001G	-030	533 17	В	74A753317
76P-F002A	-020	530 08	A/B	74A753008
76P-F002B	-020	532 18	A	74A753218
76P-F002B	-030	533 18	В	74A753318
76P-F002E	-020	532 16	A	74A753216
76P-F002E	-030	533 16	В	74A753316
76P-F002G	-020	532 14	A	74A753214
76P-F002G	-030	533 14	В	74A753314
76P-F004A	-020	532 16	A	74A753216
76P-F004A	-030	533 16	В	74A753316
76P-F004B	-020	530 14	A	74A753014
76P-F004B	-020	531 14	B	74A753014 74A753114
76Р-F004В 76Р-F004С	-020 -020	530 07	A/B	
				74A753007
76P-F004D	-020	530 39	A/B	74A753039
76P-F004E	-020	530 20	A	74A753020
76P-F004E	-020	531 20	B	74A753120
76P-F004F	-020	530 09	A/B	74A753009
76P-F004G	-020	530 40	A/B	74A753040
76P-F004H	-020	530 08	A/B	74A753008

	REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
	76P-F005	-020	530 12	A/B	74A753012
	76P-F012A	-020	530 15	A/B	74A753015
	76P-F012B	-020	530 29	A/B	74A753029
	76P-F019	-020	531 14	В	74A753114
	76P-F019	-050	600 16	A	74A760016
	76P-F029	-020	530 15	A/B	74A753015
	76P-F042A	-020	530 08	A/B	74A753008
	76P-H009A	-010	502 01	A	74A750201
	76P-H009A	-010	503 01	В	74A750301
	76P-H009B	-010	502 01	A	74A750201
	76P-H009B	-010	502 02	A	74A750202
	76P-H009B	-010	503 01	В	74A750301
	76P-H009B	-070			
			943 18	A	74R794318
	76P-H009D	-010	502 11	A	74A750211
	76P-H009D	-010	503 11	В	74A750311
	76P-J008A	-010	502 02	A	74A750202
	76P-J008A	-010	503 02	В	74A750302
	76P-J008B	-010	502 11	A	74A750211
	76P-J008B	-010	503 11	В	74A750311
	76P-K032	-010	503 01	В	74A750301
	76P-R013A	-050	600 16	A	74A760016
	76P-R013A	-050	601 16	В	74A760116
	76P-R013B	-050	600 12	A	74A760012
	76P-R013B	-050	601 12	В	74A760112
	76R-K035	-070	705 50	В	74A770550
	76R-K036	-070	705 50	В	74A770550
	76R-K037	-070	705 50	В	74A770550
	76S-H026	-070	700 23	A	74A770023
	76S-H026	-070	705 23	В	74A770523
	76S-H020	-070	705 23	В	74A770523 74A770523
	76S-K033	-070	705 50	В	74A770550
	77CBC006	-070	700 05	A	74A770005
	77CBC006	-070	705 05	В	74A770505
	77J-G002	-020	532 19	A	74A753219
	77J-G002	-030	533 19	В	74A753319
	77J-K004	-010	501 02	В	74A750102
	77J-L004	-010	500 02	A	74A750002
	77P-E003A	-020	531 19	В	74A753119
	77P-E003B	-020	531 20	В	74A753120
	77P-E004	-020	531 19	В	74A753119
	77P-F003A	-020	530 19	A	74A753019
	77P-F003B	-020	530 20	A	74A753020
	77P-F004	-020	530 19	A	74A753019
	77P-K001A	-010	501 02	В	74A750102
	77P-K001B	-010	503 01	В	74A750301
	77P-K001E	-010	503 01	В	74A750301 74A750301
	77P-K001E	-010 -010	503 01	В	74A750301 74A750301
		-010 -010	500 02		
	77P-L001A			A	74A750002
	77P-L001B	-010	502 02	A	74A750202
	77P-L001E	-010	502 02	A	74A750202
	77P-L001G	-010	502 02	A	74A750202
	78CBC004	-070	700 42	A	74A770042
	78CBC004	-070	705 42	В	74A770542
	78CBC009	-070	700 42	A	74A770042
	78CBC009	-070	705 42	В	74A770542
	78J-B007	-020	530 21	A/B	74A753021
i	78J-E008	-020	530 22	A	74A753022

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
78J-P008	-050	601 12	В	74A760112
78K-C010	-070	700 05	A	74A770005
78K-C010	-070	705 05	В	74A770505
78P-B007	-020	520 07	A/B	74A752007
78P-E001A	-020	532 17	A	74A753217
78P-E001A	-030	533 17	В	74A753317
78P-E001B	-020	532 17	A	74A753217
78P-E001B	-030	533 17	В	74A753317
78P-E001C	-020	530 22	A	74A753022
78P-E001C	-020	531 22	В	74A753122
78P-E001D	-020	530 21	A/B	74A753021
78P-E003	-020	532 17	A	74A753217
78P-E003	-030	533 17	В	74A753317
78P-E008	-020	531 22	В	74A753122
78P-E008	-050	600 12	A	74A760012
78P-K005	-010	502 02	A	74A750202
78P-L005	-010	503 02	В	74A750302
78S-H006	-070	700 23	A	74A770023
78S-H006	-070	705 23	В	74A770523
79CBD002	-070	700 02	A/B	74A770002
79CBD002	-070	700 04	A/B	74A770004
79CBD002	-070	705 04	В	74A770504
79CBD002	-070	700 02	A/B	74A770002
79CBD003	-070	700 02	A/B A/B	74A770002
79CBD004 79CBD005	-070	700 02	A/B A/B	74A770002
79CBD003	-070 -070	700 02	A/B A/B	74A770002 74A770002
79CBD037	-070	700 02	A/B A/B	74A770002 74A770002
79CBD038 79CBD039	-070 -070	700 02 700 04	A/B A/B	74A770002 74A770004
79CBD039	-070 -070	705 04	В	74A770504
79J-E023	-070 -070		В	
79J-E023 79J-L023	-070 -070	705 55		74A770555
79J-L023 79J-L024	-070 -010	700 55 502 02	A	74A770055 74A750202
	-010 -070		A	
79J-L024 79K-C031		943 18	A	74R794318
79K-C031 79K-C031	-030 -070	533 19 700 05	В	74A753319 74A770005
	-070 -070	700 03	A	
79K-C031	-070 -070	705 05 705 05	В	74A770505
79K-C031G 79K-C032	-070 -070	703 03	В	74A770505 74A770005
			A A /B	
79K-C032	-070	700 50	A/B	74A770050
79K-C032	-070 -070	705 05 705 55	В	74A770505
79K-E033			В	74A770555
79K-E034	-070 070	705 55	В	74A770555
79K-L033	-070 070	700 55	A	74A770055
79K-L034	-070 -070	700 55	A	74A770055
79K-L035		700 55	A	74A770055
79P-E021A	-030	533 16	В	74A753316
79P-E021A	-070	943 27	В	74R794327
79P-E021A	-070	943 30	В	74R794330
79P-E021B	-030	533 16	В	74A753316
79P-E021B	-070	943 27	В	74R794327
79P-E021B	-070	943 30	В	74R794330
79P-E023	-030	533 16	В	74A753316
79P-E023	-070	943 27	В	74R794327
79P-E023	-070	943 30	В	74R794330
79P-J001A	-010	502 03	A	74A750203
79P-J001A	-010	503 03	В	74A750303

001 02 Page 78A/(B blank)

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
79P-J001B	-010	502 03	A	74A750203
79P-J001B	-010	503 03	В	74A750303
79P-J001B	-070	943 18	A	74R794318

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
79P-L021A	-010	502 02	A	74A750202
79P-L021A	-070	943 18	A	74R794318
79P-L021B	-010	502 02	A	74A750202
79P-L021B	-070	943 18	A	74R794318
79P-L023	-010	502 02	A	74A750202
79P-L023	-070	943 18	A	74R794318
8A-J002	-070	700 18	A/B	74A770018
8CBC105	-070	705 42	В	74A770542
8CBC106	-070	705 42	В	74A770542
8CBC107	-070	705 42	В	74A770542
8CBC108	-070	705 42	В	74A770542
8CBD003	-070	700 10	A/B	74A770010
8CBD004	-070	700 10	A/B	74A770010
8CBD005	-070	700 02	A/B	74A770002
8CBD005	-070	700 04	A/B	74A770004
8CBD005	-070	705 04	В	74A770504
8CBD046	-070	700 02	A/B	74A770002
8CBD047	-070	700 02	A/B	74A770002
8CBD048	-070	700 02	A/B	74A770002
8CBD079	-070	700 02	A/B	74A770002
8DSH029	-010	502 01	A	74A750201
8DSH029	-010	503 01	В	74A750301
8DSH029	-010	502 01	A	74A750201
8DSH030	-010	503 01	В	74A750301
8DSH030	-070	701 27	A/B	74A770127
8DSH056	-070	701 68	A/B A/B	74A770127
8DSH062	-010	502 01	A/B A	74A770108 74A750201
8DSH062	-010	503 01	В	74A750301
8DSH062 8DSH063	-010	502 01	A	74A750201 74A750201
8DSH063	-010	503 01	B B	74A750201 74A750301
8DSH143	-070	701 37	A A	74A770137
8DSH143	-070	701 37	B B	74A770137 74A770138
8DSH158	-010	502 01	A	74A770138 74A750201
8DSH158	-010	503 01	В	74A750201 74A750301
8DSH158	-070	701 30	A/B	74A770130
8DSJ017	-070	502 02	A/B A	74A770130 74A750202
8DSJ017 8DSJ017	-010	503 02	В	74A750302
8DSJ017 8DSJ019	-010	502 02		74A750202
			A	
8DSJ019	-010	503 02	В	74A750302
8DSJ025 8DSJ025	-010 -010	502 02 503 02	A	74A750202 74A750302
8DSJ025 8DSJ028	-010 -010	503 02	В	74A750302 74A750202
	-010 -010	502 02	A B	
8DSJ028				74A750302
8DSJ039	-070 -070	700 30	A/B	74A770030 74A770032
8DSJ053		700 32 502 24	A/B	
8DSJ054	-010 -070	502 24	A/B	74A750224
8DSJ054		701 28	A/B	74A770128
8DSJ055 8DSJ066	-010 010	502 24 502 02	A/B	74A750224 74A750202
	-010 010		A	
8DSJ066	-010	503 02	В	74A750302
8DSJ092	-010	502 02	A	74A750202
8DSJ092	-010 070	503 02	B A/D	74A750302
8DSJ128	-070	701 34	A/B	74A770134
8DSJ150	-070	701 39	A	74A770139
8DSJ150	-070	701 40	В	74A770140
8DSJ150	-070	991 20	В	99120
8DSJ150	-070	991 30	A /D	99130
8DSJ165	-070	701 72	A/B	74A770172

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
8DSK114	-010	503 01	В	74A750301
8DSK115	-010	503 01	В	74A750301
8DSK132	-010	503 21	В	74A750321
8DSK132	-070	706 75	В	74A770675
8DSK133	-010	503 21	В	74A750321
8DSK134	-010	503 21	В	74A750321
8DSK155	-010	503 02	В	74A750302
8DSL117	-010	503 02	В	74A750302
8DSL131	-010	503 22	В	74A750322
8DSL131	-070	706 78	В	74A770678
8DSL135	-010	503 02	В	74A750302
8DSL136	-010	503 02	В	74A750302
8DSL137	-070	705 53	В	74A770553
8DSL156	-010	503 22	В	74A750322
8FLH096	-070	701 27	A/B	74A770127
8FLH161	-070	701 68	A/B	74A770168
8FLJ070	-070	700 30	A/B	74A770030
8FLJ095	-070	701 28	A/B	74A770128
8FLJ164	-070	701 72	A/B	74A770172
8FLK122	-070	706 75	В	74A770172 74A770675
8FLL123	-070	706 78	В	74A770678
			В	
8FLL124 8J-H015	-070	705 53		74A770553
	-070	700 27	A/B	74A770027
8J-H018	-070	700 35	A/B	74A770035
8J-H026	-070	700 13	A/B	74A770013
8J-H027	-070	700 11	A	74A770011
8J-H027	-070	705 11	В	74A770511
8J-H059	-070	700 21	A/B	74A770021
8J-H060	-070	700 25	A/B	74A770025
8J-H061	-070	700 23	A	74A770023
8J-H061	-070	705 23	В	74A770523
8J-H064	-070	700 19	A/B	74A770019
8J-H068	-070	700 29	A/B	74A770029
8J-H071	-070	700 35	A/B	74A770035
8J-H154	-070	700 33	A/B	74A770033
8J-J002	-070	700 18	A/B	74A770018
8J-J016	-070	700 14	A/B	74A770014
8J-J022	-070	700 18	A/B	74A770018
8J-J023	-070	700 20	A/B	74A770020
8J-J024	-070	700 12	A/B	74A770012
8J-J065	-070	700 16	A/B	74A770016
8J-K119	-070	705 52	В	74A770552
8J-K151	-070	705 50	В	74A770550
8J-K160	-070	705 43	В	74A770543
8J-K163	-070	705 56	В	74A770556
8J-L098	-070	705 51	В	74A770551
8J-L152	-070	705 54	В	74A770554
8J-L153	-070	705 51	В	74A770551
8K-C109	-070	705 05	В	74A770505
8K-C110	-070	705 05	В	74A770505
8K-C111	-070	705 05	В	74A770505
8K-C113	-070	705 05	В	74A770505
8K-C140	-070	705 05	В	74A770505
8K-C140	-070	705 05	В	74A770505
	-070			
8K-C147		705 05	В	74A770505
8K-F045	-070	700 06	A	74A770006
8K-F045	-070	705 06	В	74A770506
8K-F049	-070	700 06	A	74A770006

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
8K-F049	-070	705 06	В	74A770506
8K-F050	-070	700 06	A	74A770006
8K-F050	-070	705 06	В	74A770506
8K-F067	-070	700 06	A	74A770006
8K-F067	-070	705 06	В	74A770506
8K-F093	-070	700 06	A	74A770006
8K-F093	-070	705 06	В	74A770506
8K-F094	-070	700 06	A	74A770006
8K-F094	-070	705 06	В	74A770506
8K-F112	-070	700 06	A	74A770006
8K-F112	-070	705 06	В	74A770506
8P-H052	-010	502 01	A	74A750201
8P-H052	-010	503 01	В	74A750301
8P-J002	-010	502 02	A	74A750202
8P-J002	-010	503 02	В	74A750302
8P-J020	-010	502 02	A	74A750202
		503 02		
8P-J020	-010		В	74A750302
8P-J021	-010	502 02	A	74A750202
8P-J021	-010	503 02	В	74A750302
8P-J042	-010	502 02	A	74A750202
8P-J042	-010	503 02	В	74A750302
8P-J042	-030	533 12	В	74A753312
8P-K126	-010	503 01	В	74A750301
8P-L001A	-010	502 02	A	74A750202
8P-L001A	-010	503 02	В	74A750302
8P-L001B	-010	502 02	A	74A750202
8P-L001B	-010	503 02	В	74A750302
8P-L080	-010	502 18	A	74A750218
8P-L080	-010	503 18	В	74A750318
8P-L080A	-070	991 20	В	99120
8P-L080A	-070	991 30	A	99130
8P-L080B	-010	502 18	A	74A750218
8P-L080B	-010	503 18	В	74A750318
8P-L097A	-010	503 02	В	74A750302
8P-L097B	-010	503 02	В	74A750302
8P-L097B	-070	943 28	В	74R794328
8P-L098	-010	503 02	В	74A750302
8P-L118	-010	503 02	В	74A750302
8P-L127	-010	503 02	В	74A750302
8R-J007	-070	700 18	A/B	74A770018
8R-J007 8R-J008				
	-070	700 18	A/B	74A770018
8R-J009	-070	700 18	A/B	74A770018
8R-J010	-070	700 18	A/B	74A770018
8R-L100	-070	705 51	В	74A770551
8R-L101	-070	705 51	В	74A770551
8R-L102	-070	705 51	В	74A770551
8R-L103	-070	705 51	В	74A770551
8S-J011	-070	700 18	A/B	74A770018
8S-J012	-070	700 18	A/B	74A770018
8S-L099	-070	705 51	В	74A770551
80CBC004	-070	700 42	A	74A770042
80CBC004	-070	705 42	В	74A770542
80CBC005	-070	700 42	A	74A770042
80CBC005	-070	705 42	В	74A770542
80CBC006	-070	700 42	A	74A770042
80CBC006	-070	705 42	В	74A770542
80CBC010	-070	700 42	A	74A770042
80CBC010	-070	705 42	В	74A770542

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
80CBC011	-070	700 42	A	74A770042
80CBC011	-070	705 42	В	74A770542
80CBC012	-070	700 42	A	74A770042
80CBC012	-070	705 42	В	74A770542
80CBD007	-070	700 02	A/B	74A770002
80CBD008	-070	700 02	A/B	74A770002
80CBD009	-070	700 02	A/B	74A770002
80J-J020	-010	503 05	В	74A750305
80J-J020	-070	943 22	В	74R794322
80J-K023	-070	705 56	В	74A770556
80J-L018	-010	503 03	В	74A750303
80J-L021	-010	502 03	A	74A750203
80J-L021	-010	503 05	В	74A750305
80J-L021	-070	943 19	A	74R794319
80J-L021	-070	943 25	В	74R794319 74R794325
80J-L022	-010	502 03	A	74A750203
80J-L022	-010	503 05	В	74A750305
80J-L022	-070	943 20	A	74R794320
80J-L022	-070	943 26	В	74R794326
80P-H001A	-010	502 03	A	74A750203
80P-H001A	-010	503 03	В	74A750303
80P-H001B	-010	502 03	A	74A750203
80P-H001B	-010	503 03	В	74A750303
80P-H001B	-070	943 20	A	74R794320
80P-J002A	-010	502 03	A	74A750203
80P-J002A	-010	503 03	В	74A750303
80P-J002A	-070	943 28	В	74R794328
80P-J002B	-010	502 03	A	74A750203
80P-J002B	-010	503 03	В	74A750303
80P-J002B	-070	943 19	A	74R794319
80P-J003A	-010	502 03	A	74A750203
80P-J003A	-010	503 03	В	74A750303
80P-J003B	-010	502 03	A	74A750203
80P-J003B	-010	503 03	В	74A750303
80P-J020	-010	503 03	В	74A750303
80P-K019A	-010	503 05	В	74A750305
80P-K019B	-010	503 05	В	74A750305
80P-K023	-010	503 05	В	74A750305
80P-K023	-070	943 28	В	74R794328
80P-L016A	-010	503 05	В	74A750305
80P-L016B	-010	503 05	В	74A750305
80P-L017A	-010	503 05	В	74A750305
80P-L017B	-010	503 05	В	74A750305
80P-L018	-010	503 05	В	74A750305
80P-L021	-010	502 02	A	74A750202
80P-L021	-010	503 02	В	74A750302
80P-L021	-070	943 18	A	74R794318
80P-L022	-010	502 02	A	74A750202
80P-L022	-010	503 02	В	74A750302
80P-L022	-070	943 18	A	74R794318
80S-H014	-070	700 35	A/B	74A770035
80S-H015	-070	700 35	A/B	74A770035
80S-K024	-070	705 56	В	74A770556
82CBD002	-070	700 02	A/B	74A770002
82CBD002	-070	700 02	A/B A/B	74A770002 74A770004
82CBD002 82CBD003	-070	700 04	A/B A/B	74A770004 74A770002
82CBD003 82CBD003	-070	700 02	A/B A/B	74A770002 74A770004
82CBD004	-070	700 02	A/B	74A770002

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
82CBD004	-070	700 04	A/B	74A770004
82CBD005	-070	700 04	A/B	74A770004
82CBD005	-070	705 04	В	74A770504
82P-F001A	-020	532 16	A	74A753216
82P-F001A	-030	533 16	В	74A753316
82P-F001B	-020	532 16	A	74A753216
82P-F001B	-030	533 16	В	74A753316
82P-F001C	-020	532 17	A	74A753217
82P-F001C	-030	533 17	В	74A753317
83CBC006	-070	700 05	A	74A770005
83CBC006	-070	705 05	В	74A770505
83CBC007	-070	700 05	A	74A770005
83CBC007	-070	705 05	В	74A770505
83CBC008	-070	700 05	A	74A770005
83CBC008	-070	705 05	В	74A770505
83CBD009	-070	700 02	A/B	74A770002
83CBD010	-070	700 02	A/B	74A770002
83CBD011	-070	700 02	A/B	74A770002
83J-G003	-020	532 19	A	74A753219
83J-G003	-030	533 19	В	74A753319
83J-L018	-070	944 36	A	74R794436
83J-Y013	-070	700 17	A/B	74A770017
83K-C014	-070	700 42	A	74A770042
83K-C014	-070	705 42	В	74A770542
83P-E001A	-020	532 19	A	74A753219
83P-E001A	-030	533 19	В	74A753319
83P-E001B	-020	532 19	A	74A753219
83P-E001B	-030	533 19	В	74A753319
83P-E001C	-020	532 19	A	74A753219
83P-E001C	-030	533 19	В	74A753319
83P-E001D	-020	532 19	A	74A753219
83P-E001D	-030	533 19	В	74A753319
83P-E001E	-020	532 19	A	74A753219
83P-E001E	-030	533 19	В	74A753319
83P-E005	-020	532 17	A	74A753217
83P-E005	-030	533 17	В	74A753317
83P-F002A	-020	532 19	A	74A753219
83P-F002A	-030	533 19	В	74A753319
83P-F002B	-030	532 30	A	74A753230
83P-F002B	-030	533 30	В	74A753330
83P-F002C	-020	532 19	A	74A753219
83P-F002C	-030	533 19	В	74A753319
83P-F002D	-030	532 30	A	74A753230
83P-F002D	-030	533 30	В	74A753330
83P-F002E	-030	532 30	A	74A753230
83P-F002E	-030	533 30	В	74A753330
83P-F004	-030	532 30	A	74A753230
83P-F004	-030	533 30	В	74A753330
83S-H012	-070	700 25	A/B	74A770025
83TBY013A	-070	700 17	A/B	74A770017
83TBY013B	-070	700 17	A/B	74A770017
84CBC081	-070	700 42	A	74A770042
84CBC081	-070	705 42	В	74A770542
84CBC082	-070	700 42	A	74A770042
84CBC082	-070	705 42	В	74A770542
84CBC083	-070	700 42	A	74A770042
84CBC083	-070	705 42	В	74A770542
84CBC084	-070	700 42	A	74A770042

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
84CBC084	-070	705 42	В	74A770542
84CBC087	-070	700 42	A	74A770042
84CBC087	-070	705 42	В	74A770542
84CBC089	-070	700 42	A	74A770042
84CBC089	-070	705 42	В	74A770542
84CBC090	-070	700 42	A	74A770042
84CBC090	-070	705 42	В	74A770542
84CBC101	-070	700 05	A	74A770005
84CBC101	-070	705 05	В	74A770505
84CBD030	-070	700 02	A/B	74A770002
84CBD030	-070	700 04	A/B	74A770004
84CBD030	-070	705 04	В	74A770504
84CBD080	-070	700 10	A/B	74A770010
84CBD098	-070	700 10	A/B	74A770010
84CBDO99	-070	700 10	A/B	74A770010
84CBH008	-010	502 07	A	74A750207
84CBH008	-010	502 13	A/B	74A750213
84CBH008	-010	503 07	В	74A750307
84CBH009	-010	502 07	A	74A750207
84CBH009	-010	502 13	A/B	74A750213
84CBH009	-010	503 07	В	74A750307
84CBJ010	-010	502 08	A	74A750208
84CBJ010	-010	502 12	A/B	74A750212
84CBJ010	-010	503 08	В	74A750308
84CBJ010	-010 -010	502 08	A A	74A750308 74A750208
84CBJ011	-010 -010	502 08	A/B	74A750208 74A750212
84CBJ011	-010 -010	503 08	В	74A750212 74A750308
			A/B	
84DSJ106 84J-C026B	-070 -020	700 12 532 04		74A770012 74A753204
84J-C026B	-030	533 04	A B	74A753204 74A753304
	-030 -070	943 31	A/B	
84J-C026B	-070 -020	532 01		74R794331
84J-C026C 84J-C026C	-020 -030	532 01	A B	74A753201
	-030 -070			74A753301
84J-C026C		943 31	A/B	74R794331 74A753201
84J-E041	-020	532 01	A	
84J-E044	-020	532 04	A	74A753204
84J-E044	-030	533 04	В	74A753304
84J-E045	-020	532 01	A	74A753201
84J-E045	-020	532 02	A	74A753202
84J-E048	-020	532 04	A	74A753204
84J-E048	-030	533 04	В	74A753304
84J-F042	-020	532 02	A	74A753202
84J-F042	-030	533 02	В	74A753302
84J-F043	-020	532 03	A	74A753203
84J-F046	-020	532 02	A	74A753202
84J-F046	-030	533 02	В	74A753302
84J-F046	-050	602 02	В	74A760202
84J-F047	-020	532 03	A	74A753203
84J-H023	-010	502 07	A	74A750207
84J-H023	-010	503 07	В	74A750307
84J-H024	-010	502 07	A	74A750207
84J-H024	-010	503 07	В	74A750307
84J-H031	-010	502 07	A	74A750207
84J-H031	-010	503 07	В	74A750307
84J-H031	-070	943 32	A	74R794332
84J-H031	-070	943 33	В	74R794333
84J-H034	-010	502 07	A	74A750207

001 02 Page 84A/(B blank)

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
84J-H034	-010	503 07	В	74A750307
84J-H034	-070	943 32	A	74R794332

REFERENCE	A1-F18AC-WRM	WORK PACKAGE	MODEL	ASSEMBLY
DESIGNATION	(VOLUME NUMBER)	NUMBER	_	IDENTIFICATION
84J-H034	-070	943 33	В	74R794333
84J-H092	-010	502 07	A	74A750207
84J-J025A 84J-J025A	-010	502 07	A	74A750207 74A750307
	-010	503 07	В	
84J-J025B	-010	502 08	A	74A750208
84J-J025B	-010	503 08	В	74A750308
84J-J032	-010	502 08	A	74A750208
84J-J032	-010	503 08	В	74A750308
84J-J032	-070	943 32	A	74R794332
84J-J032	-070	943 33	В	74R794333
84J-J033	-010	502 08	A	74A750208
84J-J033	-010	503 08	В	74A750308
84J-J033	-030	533 04	В	74A753304
84J-J033	-070	943 32	A	74R794332
84J-J033	-070	943 33	В	74R794333
84J-J093	-010	502 08	A	74A750208
84J-J093	-010	503 08	B	74A750308
84J-J104	-070	700 12	A/B	74A770012
84J-J122A	-010	502 07	A	74A750207
84J-J122A	-010	502 08	A	74A750208
84J-J122A	-010	503 07	В	74A750307
84J-J122A	-010	503 08	В	74A750308
84J-J122A	-070	943 32	A	74R794332
84J-J122A	-070	943 33	В	74R794333
84J-J122B	-010	502 08	A	74A750208
84J-J122B	-010	503 08	В	74A750308
84J-J122B	-070	943 32	A	74R794332
84J-J122B	-070	943 33	В	74R794333
84J-K092	-010	503 07	В	74A750307
84J-K094	-010	503 07	В	74A750307
84J-K094	-070	943 33	В	74R794333
84J-L095	-010	503 08	В	74A750308
84J-L095	-070	943 33	В	74R794333
84J-L097A	-010	503 07	В	74A750307
84J-L097B	-010	503 08	В	74A750308
84J-M051	-050	602 01	A	74A760201
84J-M051	-060	603 01	В	74A760301
84J-M132	-060	602 49	A/B	74A760249
84J-M133	-060	602 50	A/B	74A760250
84J-N052	-050	602 02	A/B	74A760202
84J-P041	-060	603 01	В	74A760301
84J-P045	-060	603 01	В	74A760301
84J-P053	-050	602 04	A/B	74A760204
84J-P054	-060	602 20	A/B	74A760220
84J-P055	-060	602 20	A/B	74A760220
84J-P059	-060	602 37	A/B	74A760237
84J-P060	-060	602 36	A/B	74A760236
84J-P067	-050	602 02	A/B	74A760202
84J-R043	-060	603 03	В	74A760303
84J-R047	-050	602 02	В	74A760202
84J-R047	-060	603 03	В	74A760303
84J-R056	-050	602 02	A/B	74A760202
84J-R057	-050	602 14	A/B	74A760214
84J-R058	-050	602 14	A/B	74A760214
84J-R064	-060	602 38	A/B	74A760238
84J-R065	-060	602 39	A/B	74A760239
84J-R068	-050	602 04	A/B	74A760204
84J-S063	-050	602 01	A	74A760201

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
84J-S063	-060	603 01	В	74A760301
84J-U049	-040	542 06	A/B	74A754206
84J-V050	-040	552 06	A/B	74A755206
84K-C073	-070	700 05	A	74A770005
84K-C073	-070	705 05	В	74A770505
84K-C074	-070	700 05	A	74A770005
84K-C074	-070	705 05	В	74A770505
84K-C075	-070	700 05	A	74A770005
84K-C075	-070	705 05	В	74A770505
84K-C076	-070	700 42	A	74A770042
84K-C076	-070	705 42	В	74A770542
84K-C077	-070	700 42	A	74A770042
84K-C077	-070	705 42	В	74A770542
84K-C078	-070	700 05	A	74A770005
84K-C078	-070	705 05	В	74A770505
84K-C079	-070	700 42	A	74A770042
84K-C079	-070	705 42	В	74A770542
84K-C088				
	-070	700 42	A	74A770042
84K-C088	-070	705 42	В	74A770542
84K-C091	-070	700 42	A	74A770042
84K-C091	-070	705 42	В	74A770542
84K-C102	-070	700 05	A	74A770005
84K-C102	-070	705 05	В	74A770505
84K-F070	-070	700 06	A	74A770006
84K-F070	-070	705 06	В	74A770506
84K-F071	-070	700 06	A	74A770006
84K-F071	-070	705 06	В	74A770506
84K-F072	-070	700 06	A	74A770006
84K-F072	-070	705 06	В	74A770506
84K-F079	-070	700 06	A	74A770006
84K-F079	-070	705 06	В	74A770506
84L-C103	-070	701 58	A/B	74A770158
84P-C026	-020	532 04	A	74A753204
84P-C026	-030	533 04	В	74A753304
84P-C026A	-020	532 04	A	74A753204
84P-C026A	-030	533 04	В	74A753304
84P-C031	-020	532 01	A	74A753201
84P-C031	-030	533 01	В	74A753301
84P-C031	-070	943 31	A/B	74R794331
84P-C034	-020	532 04		74A753204
			A	
84P-C034	-030	533 04	B	74A753304
84P-C034	-070	943 31	A/B	74R794331
84P-C092	-020	532 01	A	74A753201
84P-D012A	-020	532 02	A	74A753202
84P-D012A	-030	533 02	В	74A753302
84P-D012B	-020	532 04	A	74A753204
84P-D012B	-030	533 04	В	74A753304
84P-D032	-020	532 01	A	74A753201
84P-D032	-020	532 02	A	74A753202
84P-D032	-030	533 02	В	74A753302
84P-D032	-070	943 31	A/B	74R794331
84P-D033	-020	532 03	A	74A753203
84P-D033	-030	533 03	В	74A753303
84P-D033	-070	943 31	A/B	74R794331
84P-D093	-020	532 02	A	74A753202
84P-D093	-030	533 02	В	74A753302
84P-E041	-030	533 02	В	74A753302 74A753301

84P-E044 -050 602 04 A/B 84P-E045 -030 533 01 B 84P-E045 -050 602 01 A 84P-E045 -070 986 06 A/B 84P-E048 -050 602 04 A/B 84P-E048 -070 986 07 A/B 84P-E092 -030 533 01 B 84P-E094 -030 533 04 B 84P-F001A -020 532 01 A 84P-F001B -020 532 01 A 84P-F001B -030 533 01 B	74A760204 74A753301 74A760201 74R798606 74A760204 74R798607 74A753301 74A753301 74A753201 74A753201 74A753301 74A753301
84P-E045 -050 602 01 A 84P-E045 -070 986 06 A/B 84P-E048 -050 602 04 A/B 84P-E048 -070 986 07 A/B 84P-E092 -030 533 01 B 84P-E094 -030 533 04 B 84P-F001A -020 532 01 A 84P-F001B -020 532 01 A	74A760201 74R798606 74A760204 74R798607 74A753301 74A753304 74A753201 74A753201 74A753301 74A753301 74A753301
84P-E045 -070 986 06 A/B 84P-E048 -050 602 04 A/B 84P-E048 -070 986 07 A/B 84P-E092 -030 533 01 B 84P-E094 -030 533 04 B 84P-F001A -020 532 01 A 84P-F001B -020 532 01 A	74R798606 74A760204 74R798607 74A753301 74A753304 74A753201 74A753201 74A753301 74A753301 74A753231
84P-E048 -050 602 04 A/B 84P-E048 -070 986 07 A/B 84P-E092 -030 533 01 B 84P-E094 -030 533 04 B 84P-F001A -020 532 01 A 84P-F001A -030 533 01 B 84P-F001B -020 532 01 A	74A760204 74R798607 74A753301 74A753304 74A753201 74A753201 74A753301 74A753231
84P-E048 -070 986 07 A/B 84P-E092 -030 533 01 B 84P-E094 -030 533 04 B 84P-F001A -020 532 01 A 84P-F001B -030 533 01 B 84P-F001B -020 532 01 A	74R798607 74A753301 74A753304 74A753201 74A753201 74A753201 74A753301 74A753231
84P-E092 -030 533 01 B 84P-E094 -030 533 04 B 84P-F001A -020 532 01 A 84P-F001A -030 533 01 B 84P-F001B -020 532 01 A	74A753301 74A753304 74A753201 74A753301 74A753301 74A753231
84P-E094 -030 533 04 B 84P-F001A -020 532 01 A 84P-F001A -030 533 01 B 84P-F001B -020 532 01 A	74A753304 74A753201 74A753301 74A753201 74A753301 74A753231
84P-F001A -020 532 01 A 84P-F001A -030 533 01 B 84P-F001B -020 532 01 A	74A753201 74A753301 74A753201 74A753301 74A753231
84P-F001A -030 533 01 B 84P-F001B -020 532 01 A	74A753301 74A753201 74A753301 74A753231
84P-F001B -020 532 01 A	74A753201 74A753301 74A753231
	74A753301 74A753231
84P-F001B -030 533 01 B	74A753231
84P-F001C -030 532 31 A/B	
84P-F001D -020 532 01 A	74A753201
84P-F001D -030 533 01 B	74A753301
84P-F001E -030 532 33 A/B	74A753233
84P-F001F -020 532 01 A	74A753201
84P-F001F -030 533 01 B	74A753301
84P-F001H -020 532 01 A	74A753201
84P-F001H -020 532 02 A	74A753202
84P-F001H -030 533 02 B	74A753302
84P-F001J -020 532 02 A	74A753202
84P-F001J -030 533 02 B	74A753302
84P-F001K -030 532 34 A/B	74A753234
84P-F001L -020 532 02 A	74A753202
84P-F001L -030 533 02 B	74A753302
84P-F001M -030 532 32 A/B	74A753232
84P-F001P -020 532 02 A	74A753202
84P-F001P -030 533 02 B	74A753302
84P-F002A -020 532 03 A	74A753203
84P-F002A -030 533 03 B	74A753303
84P-F002B -010 502 03 A	74A750203
84P-F002B -020 532 03 A	74A753203
84P-F002B -030 533 03 B	74A753303
84P-F002C -030 532 33 A/B	74A753233
84P-F002D -020 532 03 A	74A753203
84P-F002D -030 533 03 B	74A753303
84P-F002E -030 532 31 A/B	74A753231
84P-F002F -020 532 03 A	74A753203
84P-F002F -030 533 03 B	74A753303
84P-F002H -020 532 04 A	74A753204
84P-F002H -030 533 04 B	74A753304
84P-F002J -020 532 04 A	74A753204
84P-F002J -030 533 04 B	74A753304
84P-F002K -030 532 32 A/B	74A753232
84P-F002L -020 532 04 A	74A753204
84P-F002L -030 533 04 B	74A753304
84P-F002M -030 532 34 A/B	74A753234
84P-F002P -020 532 04 A	74A753204
84P-F002P -030 533 04 B	74A753304
84P-F004A -020 532 01 A	74A753201
84P-F004A -030 533 01 B	74A753301
84P-F004B -020 532 02 A	74A753202
84P-F004B -030 533 02 B	74A753302
84P-F005A -020 532 03 A	74A753203
84P-F005A -030 533 03 B	74A753303
84P-F005B -020 532 04 A	74A753204
84P-F005B -030 533 04 B	74A753304

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
84P-F006A	-020	532 03	A	74A753203
84P-F006A	-030	533 03	В	74A753303
84P-F006B	-020	532 04	A	74A753204
84P-F006B	-030	533 04	В	74A753304
84P-F007A	-020	532 01	A	74A753201
84P-F007A	-030	533 01	В	74A753301
84P-F007B	-020	532 02	A	74A753202
84P-F007B	-030	533 02	В	74A753302
84P-F042	-050	602 02	A/B	74A760202
84P-F043	-030	533 03	В	74A753303
84P-F043	-050	602 03	A	74A760203
84P-F046	-050	602 02	A/B	74A760202
84P-F047	-030	533 03	В	74A753303
84P-F047	-050	602 03	A	74A760203
84P-F048	-050	602 04	В	74A760204
84P-F095	-030	533 02	В	74A753302
84P-F095	-030	533 03	В	74A753303
84P-G035A	-020	532 13	A/B	74A753213
84P-G035B	-020	532 13	A/B	74A753213
84P-G036	-020	532 06	A	74A753206
84P-G036	-030	533 06	В	74A753306
84P-H003A	-010	502 07	A	74A750207
84P-H003A	-010	503 07	В	74A750307
84P-H003B	-010	502 07	A	74A750207
84P-H003B	-010	503 07	В	74A750307
84P-J037	-010	502 07	A	74A750207
84P-J037	-010	503 07	В	74A750307
84P-J104	-010	502 08	A	74A750208
84P-J104	-010	503 08	В	74A750308
84P-J122A	-070	700 48	A/B	74A770048
84P-J122B	-070	700 48 503 07	A/B	74A770048
84P-L096 84P-M021A	-010 -050	602 01	B A	74A750307
84P-M021A 84P-M021A	-050	602 02	A A/B	74A760201 74A760202
84P-M021A	-060	603 01	В	74A760202 74A760301
84P-M021A	-070	986 06	A/B	74R798606
84P-M021B	-050	602 02	A/B A/B	74K798000 74A760202
84P-M021B	-050	602 02	A/B A	74A760202
84P-M021B	-060	603 03	В	74A760303
84P-M021C	-050	602 03	A A	74A760203
84P-M021C	-060	603 03	В	74A760303
84P-M021D	-050	602 04	A/B	74A760204
84P-M021D	-070	986 07	A/B	74R798607
84P-M029A	-050	602 01	A	74A760201
84P-M029A	-060	603 01	В	74A760301
84P-M029A	-070	986 08	A/B	74R798608
84P-M029B	-050	602 02	A/B	74A760202
84P-M029B	-070	986 09	A/B	74R798609
84P-M029C	-050	602 03	A	74A760203
84P-M029C	-060	603 03	В	74A760303
84P-M029D	-050	602 04	A/B	74A760204
84P-M029D	-070	986 10	A/B	74R798610
84P-M051	-040	542 08	A/B	74A754208
84P-M110A	-060	602 49	A/B	74A760249
84P-M110B	-060	602 50	A/B	74A760250
84P-M132	-050	602 01	A	74A760201
84P-M132	-060	603 01	В	74A760301
84P-M132	-070	986 06	A/B	74R798606

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
84P-M133	-050	602 04	A/B	74A760204
84P-M133	-070	986 07	A/B	74R798607
84P-N052	-040	552 08	A/B	74A755208
84P-P053	-050	602 08	A/B	74A760208
84P-P054	-050	602 08	A/B	74A760208
84P-P059	-050	602 08	A/B	74A760208
84P-P060	-060	602 40	A/B	74A760240
84P-P067	-060	602 40	A/B	74A760240
84P-R056	-050	602 06	A/B	74A760206
84P-R057	-050	602 06	A/B	74A760206
84P-R064	-050	602 06	A/B	74A760206
84P-R065	-060	602 41	A/B	74A760241
84P-R068	-060	602 41	A/B	74A760241
84P-S015A	-050	602 01	A	74A760201
84P-S015A	-060	603 01	В	74A760301
84P-S015B	-060	612 02	A/B	74A761202
84P-S015C	-050	602 03		74A761202 74A760203
			A	
84P-S015C	-060	603 03	B	74A760303
84P-S015D	-060	612 04	A/B	74A761204
84P-S017A	-050	602 01	A	74A760201
84P-S017A	-060	603 01	В	74A760301
84P-S017B	-060	612 04	A/B	74A761204
84P-S055	-060	612 04	A/B	74A761204
84P-T016A	-050	602 01	A	74A760201
84P-T016A	-060	603 01	В	74A760301
84P-T016B	-060	612 02	A/B	74A761202
84P-T016C	-050	602 03	A	74A760203
84P-T016C	-060	603 03	В	74A760303
84P-T016D	-060	612 04	A/B	74A761204
84P-T018A	-050	602 03	A	74A760203
84P-T018A	-060	603 03	В	74A760303
84P-T018B	-060	612 02	A/B	74A761202
84P-T058	-060	612 02	A/B	74A761202
84P-U013A	-050	602 01	A	74A760201
84P-U013A	-060	603 01	В	74A760301
84P-U013B	-060	602 36	A/B	74A760236
84P-U013C	-050	602 03	A	74A760203
84P-U013C	-060	603 03	В	74A760303
84P-U013D	-060	602 37	A/B	74A760237
84P-U019A	-040	542 03	A/B A/B	74A754203
84P-U019B	-040	542 03	A/B	74A754203
84P-U027A	-040	542 05	A/B	74A754205
84P-U027B	-040	542 05	A/B	74A754205
84P-U027B	-040	552 05	A	74A755205
84P-U049	-060	602 37	A/B	74A760237
84P-V014A	-050	602 01	A	74A760201
84P-V014A	-060	603 01	В	74A760301
84P-V014B	-060	602 38	A/B	74A760238
84P-V014C	-050	602 03	A	74A760203
84P-V014C	-060	603 03	В	74A760303
84P-V014D	-060	602 39	A/B	74A760239
84P-V020A	-040	552 03	A/B	74A755203
84P-V020B	-040	552 03	A/B	74A755203
84P-V028A	-040	552 05	A/B	74A755205
84P-V028B	-040	552 05	A/B	74A755205
84P-V050	-050	602 03	A	74A760203
84P-V050	-060	603 03	В	74A760303
0.2 .000	000	003 03	1 2	, 111,00000

Page 90

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
84S-J022	-010	502 08	A	74A750208
84S-J022	-010	503 08	В	74A750308
84S-J105	-070	700 12	A/B	74A770012
84S-Y110	-070	700 46	A/B	74A770046
84T-J128	-070	700 48	A/B	74A770048
84T-J129	-070	700 48	A/B	74A770048
84T-J130	-070	700 48	A/B	74A770048
84T-J131	-070	700 48	A/B	74A770048
85A-F007	-070	700 26	A/B A/B	74A770026
85CBC004	-070	700 42	A/B A	74A770042
85CBC004 85CBC004	-070	705 42	В	74A770542
85J-F007	-070	703 42	A/B	74A770026
85M-F019	-070	700 20	A/B A/B	74A770020 74A770131
85M-S011	-070	702 00	A/B	74A770200
85M-S013	-070	702 00	A/B	74A770200
85M-T010	-070	702 oo	A/B	74A770200
85M-T012	-070	702 00	A/B	74A770200
85M-U020	-070	701 32	A/B	74A770132
85M-U021	-070	701 33	A/B	74A770133
85P-F001A	-020	532 16	A	74A753216
85P-F001A	-030	533 16	В	74A753316
85P-F001B	-020	532 16	A	74A753216
85P-F001B	-030	533 16	В	74A753316
85P-F007	-020	532 16	A	74A753216
85P-F007	-030	533 16	В	74A753316
85P-G003A	-020	532 06	A	74A753206
85P-G003A	-030	533 06	В	74A753306
85P-K040A	-070	944 36	A	74R794436
85P-N002A	-060	602 25	A	74A760225
85P-N002A	-060	603 25	В	74A760325
85P-N002B	-050	602 07	A/B	74A760207
85P-N002B	-050	602 17	A/B	74A760217
85P-N002B	-050	602 18	A/B	74A760218
85P-N002B	-060	602 25	A	74A760225
85P-N002B	-060	603 25	В	74A760325
85P-N002C	-060	602 25	A	74A760225
85P-N002C	-060	603 25	В	74A760325
85P-N002D	-060	602 25	A	74A760225
85P-N002D	-060	603 25	В	74A760325
85S-F014A	-070	700 26	A/B	74A770026
85S-F014B	-070	700 26	A/B A/B	74A770026
85S-F014C	-070	700 26	A/B A/B	74A770026
85S-F014D	-070	700 26	A/B A/B	74A770026
85S-F014E	-070	700 26	A/B A/B	74A770026
85S-F014E 85S-F014F	-070			
	-070	700 26 700 26	A/B	74A770026
85S-F015A		700 26	A/B	74A770026
85S-F015B	-070	700 26	A/B	74A770026
85S-F015C	-070	700 26	A/B	74A770026
85S-F015D	-070	700 26	A/B	74A770026
85S-F015E	-070	700 26	A/B	74A770026
85S-F015F	-070	700 26	A/B	74A770026
85S-F016A	-070	700 26	A/B	74A770026
85S-F016B	-070	700 26	A/B	74A770026
85S-F016C	-070	700 26	A/B	74A770026
85S-F016D	-070	700 26	A/B	74A770026
85S-F016E	-070	700 26	A/B	74A770026
85S-F016F	-070	700 26	A/B	74A770026
85S-F017A	-070	700 26	A/B	74A770026

REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
85S-F017B	-070	700 26	A/B	74A770026
85S-F017C	-070	700 26	A/B	74A770026
85S-F017D	-070	700 26	A/B	74A770026
85S-F017E	-070	700 26	A/B	74A770026
85S-F017F	-070	700 26	A/B	74A770026
85S-F018A	-070	700 26	A/B	74A770026
85S-F018B	-070	700 26	A/B	74A770026
85S-F018C	-070	700 26	A/B	74A770026
85S-F018D	-070	700 26	A/B	74A770026
85S-F018E	-070	700 26	A/B	74A770026
85S-F022A	-070	700 26	A/B	74A770026
85S-F022B	-070	700 26	A/B	74A770026
85S-F022C	-070	700 26	A/B	74A770026
85S-F022D	-070	700 26	A/B	74A770026
85S-F022E	-070	700 26	A/B	74A770026
85S-F022F	-070	700 26	A/B	74A770026
85S-F023A	-070	700 26	A/B	74A770026
85S-F023B	-070	700 26	A/B	74A770026
9CBD002	-070	700 02	A/B	74A770002
9CBD002	-070	700 04	A/B	74A770004
9CBD002	-070	705 04	В	74A770504
9CBD004	-070	700 02	A/B	74A770002
9CBD006	-070	700 02	A/B	74A770002
9CBD006	-070	700 04	A/B	74A770004
9CBD006	-070	705 04	В	74A770504
9K-N001	-070	702 01	A/B	74A770201
9P-P005	-060	602 32	A/B	74A760232
9S-J003	-070	700 16	A/B	74A770016

INTRODUCTION

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

1. PURPOSE AND SCOPE.

- 2. This technical manual is part of a 9 volume set called the wiring repair manual (WRM). The WRM volumes provides maintenance instructions and part number information for the F/A-18A and F/A-18B aircraft.
- 3. This manual provides primary information for repairing electrical cables and wiring assemblies. Cable assemblies are wire bundles used on the aircraft or on attached external units. Wiring assemblies are internal wiring used in WRAs (Weapons Replaceable Assemblies).
- 4. This manual is prepared in work package format.
- a. Work package numbers are found at the upper right corner of each page (see figure 1).
- b. Work package numbers divide each of the WRM volumes into individual data units to complete a specific task.
- 5. The following work packages are referenced by the introduction to orientate the technician to WRM volumes.

6. ABBREVIATIONS AND SYMBOLS.

7. Each nonstandard abbreviation in this manual is explained in the glossary.

GLOSSARY

TDR - Time Domain Reflectometer

TPDR - Technical Publications Deficiency Report

WRA - Weapons Replaceable Assemblies

8. DESCRIPTION.

- 9. The aircraft wiring in the WRM volumes is divided into two major categories, cable assemblies and wiring assemblies.
- 10. **CABLE ASSEMBLIES.** Cable assemblies (wire bundles) are made of hookup wires held together by a braided outer jacket. Braided assemblies are sometimes referred to as compact wire bundles. Support data for these assemblies are located in volumes A1-F18AC-WRM-010 thru A1-F18AC-WRM-060.
- 11. **WIRING ASSEMBLIES.** Wiring assemblies are made of wires held together by a braided outer jacket or string ties. These assemblies are used in panel assemblies and are located in volume A1-F18AC-WRM-070

12. EFFECTIVITIES.

- 13. Effectivity notes on manual title pages, work package title pages, and effectivity notations (use on codes) within a work package indicated the aircraft to which the data applies. If no effectivity note appears on the work package title page, the work package has the same effectivity as shown on the manual title page. The effectivity notes (use on codes) may use:
 - a. Type, model and series.
 - b. Bureau number (tail number).
- c. Combination of type, model, series, and bureau number.

The table below shows examples of effectivity notes and their meanings:

Effectivity Note Examples

Effectivity Note	Definition
161359 AND UP	Applicable to all F/A-18A and F/A-18B for bureau numbers listed.
F/A-18A, F/A-18B	Applicable to all F/A-18A and F/A-18B.
F/A-18A	Applicable to all F/A-18A, but not F/A-18B.
F/A-18B	Applicable to all F/A-18B, but not F/A-18A.
F/A-18A 161353, 161359 THRU 161364	Only applicable to some bureau numbers of F/A-18A. Not applicable to any F/A-18B, even if an F/A-18B bureau number is within the numbers listed.
F/A-18B 161356 AND UP	Only applicable to some bureau numbers of F/A-18B. Not applicable to any F/A-18A, even if an F/A-18A bureau number is within the numbers listed.
161353 THRU 161359 BEFORE F18AFC- 008	Applicable to all F/A-18A and F/A-18B for bureau numbers listed before modification by technical directive.

Example 1. Effectivity Note

14. MANUAL ISSUE DATE.

15. The manual date on the title page is the copy freeze date. No additions, deletions, or changes are made after the manual issue date, except last minute safety of flight or required maintenance changes. Data collected after the manual issue date will be included in later changes or revisions of the manual.

16. TECHNICAL PUBLICATIONS DEFI-CIENCY REPORT (TPDR).

17. The TPDR (OPNAV FORM 4790/66) is the form for reporting errors and suspected omissions in the technical manual. Reporting procedures are in OPNAV-INST 4790.2 SERIES.

18. RECORD OF APPLICABLE TECHNICAL DIRECTIVES.

19. All known Technical Directives (AFC's and AFB's) applicable to this manual are contained in the Record of Applicable Technical Directives list in each affected

work package (see figure 1). Some AFC's and AFB's may be listed prior to their release date. When all affected aircraft are modified, the before configuration is removed from the manual, and the technical directive entry is removed from the Record of Applicable Technical Directives in the affected work package.

20. WARNINGS, CAUTIONS, AND NOTES.

- 21. Warnings, Cautions, and Notes are used to highlight certain conditions when there is existing danger to personnel and equipment.
- a. WARNING. To highlight a condition that could result in injury or death if correct procedures are not followed.
- b. CAUTION. To highlight a condition that could result in damage to or destruction of equipment if correct procedures are not followed.
- c. NOTES. To emphasize or clarify a condition or procedure.

		WORK PACKAGE NUMBER
 A1-F18A0	C-WRM-050	602 05
5 August 1984		Page 1
	ANIZATIONAL AND INTERME WIRING REPAIR WITH F A760205 CENTER FUSELAGI	PARTS DATA
	Referen	nce Material
Wiring Repair With	Parts Data Manual	A1-F18AC-WRM-000 A1-F18A()-WDM-000
	ULLUULoccooccooccooccooccooccooccooccooc	
White Diagrams Mi		
Subject Legend	Alphabetical In	2
Subject Legend Parts List		Lage is
Subject Legend Parts List		
Subject Legend Parts List		3 5
Subject Legend Parts List	Record of Applicable Tech	
Subject Legend Parts List	Record of Applicable Tech	
Subject Legend Parts List	Record of Applicable Tech	
Subject Legend Parts List	Record of Applicable Tech	3 5
Subject Legend Parts List	Record of Applicable Tech	

INTRODUCTION

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE UNWIRING REPAIR WITH PARTS DATA PART IDENTIFICATION AND WIRING INFORMATION

Reference Material

None

Record of Applicable Technical Directives

None

1. INTRODUCTION.

- 2. This work package shows how typical aircraft wiring is identified, and defines some of the components of aircraft wiring. Figure 1 shows a typical cable assembly and some of the different components and identifying markers of the cable assembly.
- 3. ASSEMBLY PART NUMBER IDENTIFICATION MARKER. See example 1.

4. Each typical cable or wiring assembly has an assembly part number identification marker (only one per assembly) see figure 1. The cable/wiring assembly part number identification marker is located on the assemblies main trunk, near the center of the bundle. On wiring assemblies, the marker is attached to the assembly. The assembly part number identification marker is used to order a replacement cable or wiring assembly.

Page 2

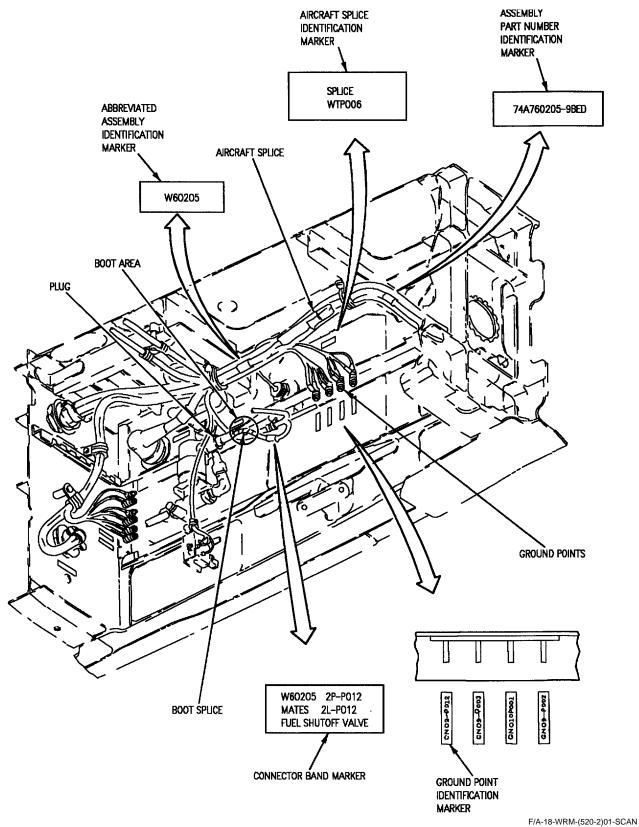
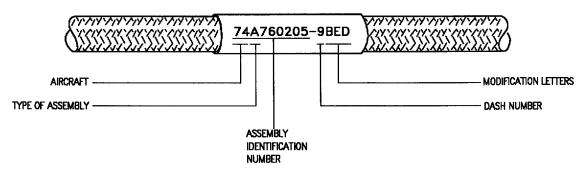


Figure 1. Typical Wiring Installation Assembly

5. The part number identification marker assigned to each McDonnell Douglas (76301) cable/wiring assembly contains the basic assembly identification number followed by a dash nine and three modification letters ranging from AAA to ZZZ. The cable/wiring assembly part number identification markers are made of two different types of material, high temperature (over

300°F) and low temperature (under 300°F). The B652-1-500BEIGE (85480) pressure sensitive, adhesive, polymide tape, with liner is used for high temperature areas. B637-1-500YELLOW (85480) pressure sensitive, adhesive, polyvinflouride tape, with liner is used for low temperature areas.



F/A-18-WRM-(520-3)01-CATI

Example 1. Assembly Part Number Identification Marker

- a. AIRCRAFT. 74 = F/A-18A and F/A-18B aircraft.
 - b. TYPE OF ASSEMBLY.
 - A Production Assembly
 - R Retrofit Assembly
 - c. ASSEMBLY IDENTIFICATION NUMBER.

Assembly identification numbers are assigned for each typical cable or wiring assembly located in each section of the aircraft. An assembly identification number is the same as the part number identification marker number except it lacks the assembly dash number and modification letters. Assembly identification numbers appear on the cable/wiring assembly index (WP001 01) and the reference designation index (WP001 02).

74A750001 thru 74A750999 Cockpit 74A752001 thru 74A752999 Nose

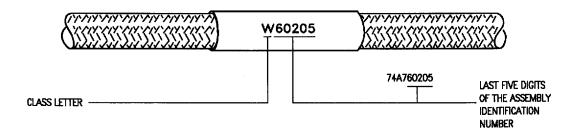
74A753001 thru 74A753999	Forward Fuselage
74A754001 thru 74A754999	Left Wing
74A755001 thru 74A755999	Right Wing
74A756001 thru 74A756999	Miscellaneous
74A760001 thru 74A760999	Center Fuselage
74A761001 thru 74A761999	Aft Fuselage
74A770001 thru 74A779999	Panel Assemblies
74R794300 thru 74R794999	Retrofit
	Assemblies
74R798600 thru 74R798999	Retrofit
	Assemblies

- d. DASH NUMBER. Dash number will be -9.
- e. MODIFICATION LETTERS. Made up of three alpha letters assigned in sequence to indicate configuration changes to an assembly.

6. ABBREVIATED ASSEMBLY IDENTIFICATION MARKER. See example 2.

7. The abbreviated assembly identification marker is a shortened version of the assembly identification number, see figure 1. It is made up of the last five digits of the assembly identification number preceded by a class

letter. The number of abbreviated assembly identification markers on each cable/wiring assembly varies. The markers are spaced on the branches at enough intervals that will identify the cable/wiring assembly. An explanation of abbreviated assembly identification marker is shown on example 2.



F/A-18-WRM-(520-4)01-CATI

Example 2. Abbreviated Assembly Identification Marker

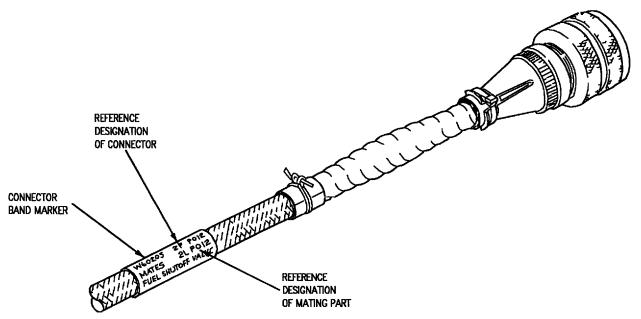
a. CLASS LETTER. Cable and wiring assemblies are always Class W.

b. LAST FIVE DIGITS OF THE ASSEMBLY IDENTIFICATION NUMBER. This portion of the assembly identification number identifies the cable or wiring assembly.

8. **CONNECTOR BAND MARKER.** See example 3.

9. There is one marker 9 inches from each connector, see figure 1. Connector band markers are assigned a

reference designation number to identify and locate the connector and its mating connector as described in example 3. For description and definition of reference designation numbers, see WP002 02.



F/A-18-WRM-(520-5)01-CATI

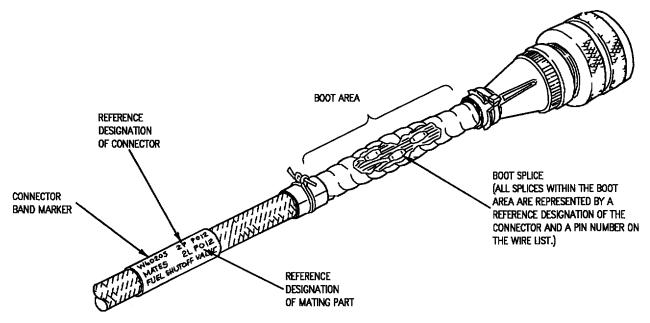
Example 3. Connector Band Identification Marker

10. **BOOT AREA.** See figure 1.

11. This is the part of a bundle directly behind the electrical connector and up to the bundle braid. The boot area allows access to the electrical contacts and splices.

12. **BOOT SPLICES.** See example 4.

13. Joins two or more wires within same cable/wiring assembly, see figure 1. Splices are made within boot area of a connector. Boot splices are assigned a reference designation and pin number as described in example 4.



F/A-18-WRM-(520-6)01-CATI

Example 4. Boot Splices

a. REFERENCE DESIGNATION: The identification of an item in which the Boot Splice is made.

NOTE

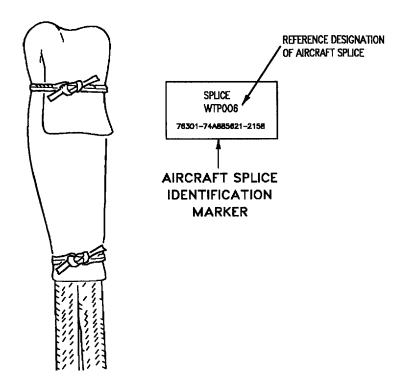
Wires with same pin numbers are spliced together. Pin numbers are used within manual only. They are not identified on the aircraft.

b. PIN NUMBER: Numbers S001 through S999 indicate two or more wires spliced together within same cable assembly.

14. AIRCRAFT SPLICE IDENTIFICATION MARKER. See example 5.

15. There is one marker in the general area of the aircraft splice on the structure, see figure 1. Aircraft

splice identification markers are assigned a reference disignation number to identify and locate the aircraft splice as described in example 5.

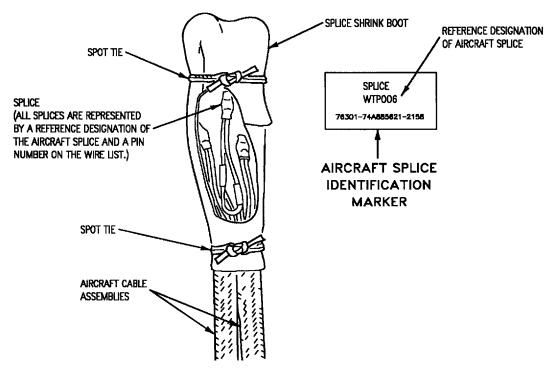


F/A-18-WRM-(520-7)01-SCAN

Example 5. Aircraft Splice Identification Marker

16. **AIRCRAFT SPLICES.** See example 6.

- 17. Joins two or more cable assemblies, see figure 1. Aircraft splices are assigned a reference designation, see work package 002 02 and a pin number as described in Example 6.
- a. REFERENCE DESIGNATION: The identification of an item in which the aircraft splice is made.
- b. PIN NUMBER: Wires with same pin numbers are spliced together. Pin numbers are used within manual only. They are not identified on the aircraft.

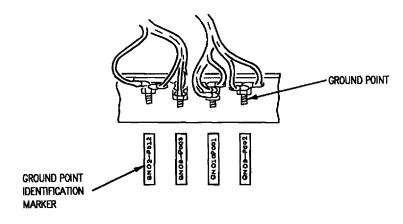


F/A-18-WRM-(520-8)01-SCAN

Example 6. Aircraft Splices

18. **GROUND POINT IDENTIFICATION MARKER.** See example 7.

- 19. Ground point identification markers are assigned a reference designation and a pin number, see figure 1.
- a. REFERENCE DESIGNATION: The identification of an item in which the ground termination is made, see work package 002 02.
- b. PIN NUMBER. Wires with same pin number are crimped in common terminal.



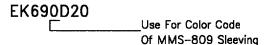
F/A-18-WRM-(520-9)01-SCAN

Example 7. Ground Point Identification Marker

20. WIRE NUMBER IDENTIFICATION SLEEVING.

21. For all wire identification use shrinkable sleeving (MMS-809 thin wall or bandolier) (table 1).

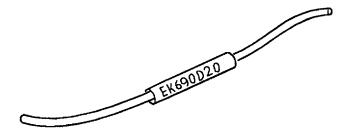
Select sleeving color per last digit of wire number. See example 8. On multiple wire identification use a white sleeve.



F/A-18-WRM-(500-1)01-CATI

Example 8. Color Code of MMS-809 Sleeving

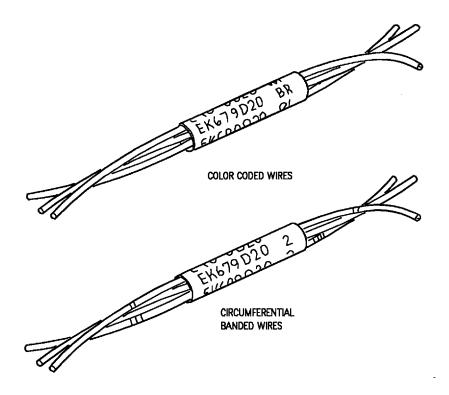
a. SINGLE WIRES. Wire sleeving is used on single wires marked with wire number only. See example 9.



F/A-18-WRM-(520-10)01-SCAN

Example 9. Single Wire Number Identification Sleeving

b. TWISTED WIRES. Twisted wires are band number or wire color code. Table 2 identifies marked as a group with wire number and either band definition. See example 10.



F/A-18-WRM-(520-11)01-SCAN

Example 10. Twisted Wire Number Identification Sleeving

Table 1. MMS-09 Sleeving

Part Number	Vendor	Before Shrinking Minimum (Inch)	After Shrinking Maximum (Inch)	Type Sleeving	
MMS-809-*-3/64	76301	3/64	1/32	STANDARD WALL	
MMS-809-*-1/16	76301	1/16	1/32	STANDARD WALL	
MMS-809-*-3/32	76301	3/32	3/64	STANDARD WALL	
MMS-809-*-1/8	76301	1/8	1/16	STANDARD WALL	
MMS-809-*-1/16	76301	1/16	3/32	STANDARD WALL	
MMS-809-*-1/4	76301	1/4	1/8	STANDARD WALL	
MMS-809-*-3/8	76301	3/8	3/16	STANDARD WALL	
MMS-809-*-1/2	76301	1/2	1/4	STANDARD WALL	
MMS-809-*-3/4	76301	3/4	3/8	STANDARD WALL	
MMS-809-*-1	76301	1	1/2	STANDARD WALL	
MMS-809-*-1-1/2	76301	1-1/2	3/4	STANDARD WALL	
MMS-809-*-2	76301	2	1	STANDARD WALL	
MMS-809-*-3	76301	3	1-1/2	STANDARD WALL	
MMS-809-*-4	76301	4	2	STANDARD WALL	
MMS-809-*-T1/16	76301	1/16	1/32	THIN WALL	
MMS-809-*-T3/32	76301	3/32	3/64	THIN WALL	
MMS-809-*-T1/8	76301	1/8	1/16	THIN WALL	
MMS-809-*-T3/16	76301	3/16	3/32	THIN WALL	
MMS-809-*-T1/4	76301	1/4	1/8	THIN WALL	
MMS-809-*-B3/32	76301	3/32	1/32	BANDOLIER	
MMS-809-*-B1/8	76301	1/8	3/64	BANDOLIER	
MMS-809-*-B3/16	76301	3/16	3/32	BANDOLIER	
MMS-809-*-B1/4	76301	1/4	1/8	BANDOLIER	

USE HT-900 HEAT TOOL TO SHRINK SLEEVE TEMPERATURE RANGE: -65° TO 300°F

* COLO	R CODE	INK	INK STRIP			
COLOR	COLOR CODE		COMPANY			
BLACK BROWN	0 1	YELLOW GREEN	RAYCHEM RAYCHEM			
RED ORANGE	3	ORANGE BLUE	EEC EEC			
YELLOW GREEN BLUE	5	RED VIOLET	PENNTUBE PENNTUBE			
VIOLET GRAY	7 8					
WHITE	9					

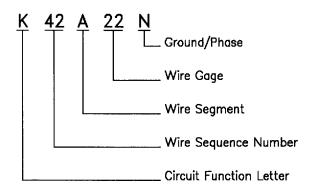
Table 2. Band Definition

WIRE BAND NUMBER	CIRCUMFERENTIAL BAND IDENTIFICATION MARKING
	1
	BAND COLORS BLACK- 16 THRU 24 GAGE WHITE- 26 GAGE

F/A-18-WRM-(520-12)01-CATI

22. WIRE NUMBER. See example 11.

23. Aircraft wires are assigned a wire identification number as described in example 11.



F/A-18-WRM-(500-2)01-CATI

Example 11. Wire Number

- a. CIRCUIT FUNCTION LETTER. The circuit function letter indicates the circuit within a particular system.
- b. WIRE NUMBER. The wire number indicates the numerical sequence of this wire in a particular circuit.
- c. WIRE SEGMENT. The wire segment is a letter designation that is used to identify a particular wire in a series used within a circuit.
- d. WIRE GAGE. The wire gage gives the American Wire Gage (AWG) size of wire. A shield is represented by SH in the wire gage.

e. GROUND/PHASE. The ground/phase suffix letter (when applicable) identifies a particular function of wire segment. An explanation of the suffix letters are as follows:

A = A wire that carries phase A power.

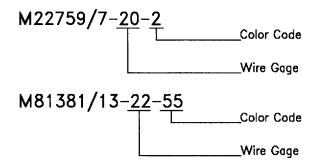
B = A wire that carries phase B power.

C = A wire that carries phase C power.

N = A ground wire.

24. WIRE GAGE COLOR IDENTIFICATION. See example 12.

25. Most of the wiring on the aircraft are gage color coded. Gage and insulation color codes are identified in table 3.



F/A-18-WRM-(500-3)01-CATI

Example 12. Wire Gage Color Identification

Table 3. Wire Gage Color Code

Table 6. Time dage delet dede								
Wire Gage	Wire Insulation Color	Color Code Dash Number (Used With Military Part Number)						
26	BLACK	0						
24	BLUE	6						
22	GREEN	5						
22	GREEN/GREEN STRIPE	55						
22	GREEN/WHITE STRIPE	59						
20	RED	2						
18	WHITE	9						
16	BLUE	6						
14	GREEN	5						
12	YELLOW	4						
10	BROWN	1						
8	RED	2						

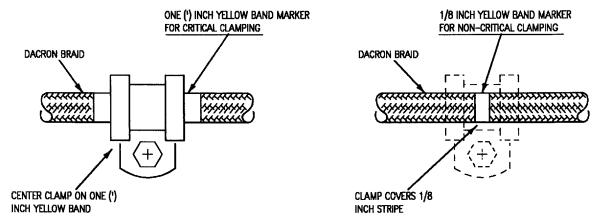
WARNING

TT-L-32 Type II paint is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.

26. YELLOW BAND MARKERS. See example 13.

27. Yellow band markers for braided compact wire bundles are painted, using brush or spray. Paint used is type II, Part Number TT-L-32, color light yellow (color number 13655). There are two types of yellow band markers. One type is used to indicate non-critical clamping. The other is used to indicate critical clamping.

- a. A non-critical yellow band marker is 1/8 inch wide. The clamp covers the marker but does not have to be centered.
- b. A critical band marker is 1 inch wide. The clamp is centered on the yellow band marker with equal amounts of paint showing on each side of the clamp.
- 28. Non-critical yellow band markers for coaxial cables may be taped or painted. Use MIL-T-23142 1/8 inch wide yellow tape or paint (Paragraph 27). Critical band markers are all painted (Paragraph 27).



F/A-18-WRM-(520-13)01-CATI

Example 13. Yellow Band Markers

1 October 1993

INTRODUCTION

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

EXPLANATION OF REFERENCE DESIGNATION AND AIRCRAFT SECTION DESIGNATION SYSTEM

Reference Material

None

Record of Applicable Technical Directives

None

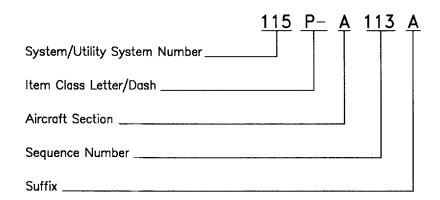
1. INTRODUCTION.

2. The reference designation is a system of identification and description for electrical parts or items. Each electrical part or item within the aircraft is assigned a unique combination of letters and numbers which is the reference designation. These reference designations are labeled on identification markers close to electrical parts or items. These reference designations are divided

into three major categories, electrical components, aircraft splices, and ground points.

3. ELECTRICAL COMPONENT REF-ERENCE DESIGNATIONS. See example 1.

4. Electrical component reference designations are assigned to aircraft electrical parts as listed in item class letter/dash paragraph.



F/A-18-WRM-(500-4)01-CATI

Example 1. Electrical Component Reference Designation

a. SYSTEM/UTILITY SYSTEM NUMBER. Sytem/ utility number is a numerical code, made to identify a

specific system of the aircraft. An explanation of this numerical code is as follows.

System/Utility System Number Nomenclature System No. **ELECTRICAL POWER** 01 **AUX POWER UNIT** 02 **ENGINE START** 03 OVERHEAT/FIRE DETECTION & EXTINGUISH 04 05 **FUEL RESERVED** 06 **EXTERIOR LIGHTING** 07 INTERNAL LIGHTING 08 ENGINE ANTI-ICE 09 HYDRAULIC PRESSURE SENSING 10 RESERVED 11 LANDING GEAR 12 **BRAKING (ANTI SKID)** 13 RESERVED 14 **OXYGEN GAGING** 15 **RESERVED** 16 WING FOLD 17 SPEED BRAKE 18 19 ARRESTING HOOK CANOPY/BOARDING LADDER 20 RESERVED 21 ENVIRONMENTAL CONTROL 22 23 WINDSHIELD ANTI-ICE 24 BLEED AIR LEAK DETECTION 25 **SEAT ADJUST** RESERVED 26 RESERVED 27 PROBE HEATERS 28 29 **RESERVED RESERVED** 30 RESERVED 31 **RESERVED** 32 STANDBY INSTRUMENTS 33 ANGLE OF ATTACK APPROACH LIGHTS 34 RESERVED 35 THRU 49 50 THRU 58 RESERVED (UTILITY) ANTENNA GROUP 59 60 **RADAR** STORES MANAGEMENT/FUZE FUNCTION/HARM/AMAC 61 **RESERVED** 62 **RESERVED** 63 **COUNTERMEASURE** 64 CHAFF COUNTERMEASURES 65 INTERFERENCE BLANKER 66 ELECTRONIC ALTIMETER 67 **INERTIAL NAVIGATION** 68 **TACAN** 69 AIR DATA COMPUTER/TOTAL TEMP PROBE/ANGLE OF ATTACK 70 71 DIRECTION FINDER RADAR BEACON & AUG RECEIVER 72 **RESERVED** 73

System/Utility System Number Nomenclature System No. ILS 74 MAGNETIC AZIMUTH DETECTOR 75 UHF/SECURE VOICE/INTERCOMM/VHF 76 DATA LINK 77 **IFF** 78 79 HEAD UP DISPLAY MULTIPURPOSE DISPLAY 80 **RESERVED** 81 COMM SYS CONTROL 82 MISSION COMPUTER 83 FLIGHT CONTROL 84 RECORDING/MONITORING 85

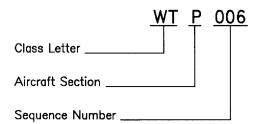
b. ITEM CLASS LETTER/DASH. Item class letter is an alphabetical code used to identify what type of item a part is. An description of the class letter is as follows:

- A Panels and Controls Units
- B Actuator
- E Antenna
- J Receptacle
- K Relay
- L Solenoid Operated Valve
- M Sensor
- P Plug
- R Resistor
- S Switch
- T Transformer
- X Contactors
- AT Attenuators
- CB Circuit Breakers
- CP Connector Adapter
- CR Diode
- DC Coupler
- DS Lamp
- FL Filter

- MT Transducer
- SQ Electric Squib
- TB Terminal Board
- c. AIRCRAFT SECTION. The section of aircraft in which the part is located. See figure 1.
- d. SEQUENCE NUMBER. Each system and utility system has a separate sequence number series ranging from 1 through 999. Each component of a system or utility system is assigned a sequence number consecutively without relationship to location in the aircraft. Mating components have the same sequence number.
- e. SUFFIX. Suffix is used where a unit has more than one connector.

5. AIRCRAFT SPLICE REFERENCE DESIGNATION.

6. Aircraft splice reference designations are assigned to wire tie points as described in example 2.



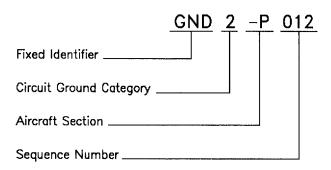
F/A-18-WRM-(500-5)01-CATI

Example 2. Aircraft Splice Reference Designation

- a. CLASS LETTERS: WT Wire tie point.
- b. AIRCRAFT SECTION: For explanation of aircraft section, see figure 1.
- c. SEQUENCE NUMBER: Each aircraft section contains a number series 1 through 999.

7. GROUND POINT REFERENCE DESIGNATION.

8. Ground point reference designations are assigned to aircraft ground points as described in example 3.

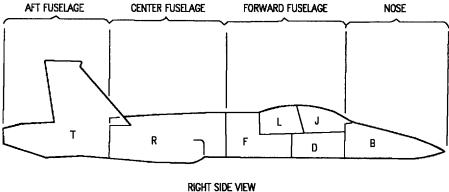


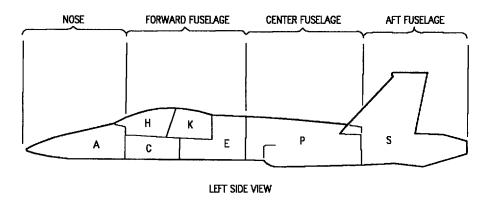
F/A-18-WRM-(500-6)01-CATI

Example 3. Ground Point Reference Designation

- a. FIXED IDENTIFIER GROUND (GND)
- b. CIRCUIT GROUND CATEGORY
 - 1 Left Hand AC Ground
 - 2 AC Ground
 - 3 Signal Ground
 - 4 Right Hand AC Ground
 - 5 26 Volt AC Ground
 - 6 Left Hand AC Panel Ground

- 7 DC Panel Ground
- 8 Right Hand AC Panel Ground
- 9 Case Ground
- 10 Shield Ground
- c. AIRCRAFT SECTION. See figure 1.
- d. SEQUENCE NUMBER. Each aircraft section contains a sequence number series 1 through 999.





NOTE

THE AIRCRAFT SECTION LETTER OF THE ELECTRICAL REFERENCE DESIGNATION NUMBER DEFINES THE LOCATION OF THE ITEM EXAMPLE



SECTION LETTER	AREA	Section Letter	AREA		
A B C D E F G H J K L M	NOSE (L SIDE) NOSE (R SIDE) NO. 2 EQUIPMENT BAY (L SIDE) NO. 2 EQUIPMENT BAY (R SIDE) NO. 3 EQUIPMENT BAY (L SIDE) NO. 3 EQUIPMENT BAY (R SIDE) NOSE GEAR WELL COCKPIT (L SIDE) COCKPIT (R SIDE) AFT COCKPIT/UPPER EQUIPMENT BAY (R SIDE) AFT COCKPIT/UPPER EQUIPMENT BAY (R SIDE) LEADING EDGE EXIT (L SIDE)	N P R S T U V W X Y Z	LEADING EDGE EXIT (R SIDE) CENTER FUSELAGE (L SIDE) CENTER FUSELAGE (R SIDE) AFT FUSELAGE (L SIDE) AFT FUSELAGE (R SIDE) WING (LEFT) WING (RIGHT) WING PYLONS (NOT SHOWN) RESERVED PANELS AND MISCELLANEOUS (NOT SHOWN) CENTERLINE PYLON (NOT SHOWN)		

F/A-18-WRM-(520-14)01-SCAN

Figure 1. Reference Designation Aircraft Section Identification (Sheet 1)

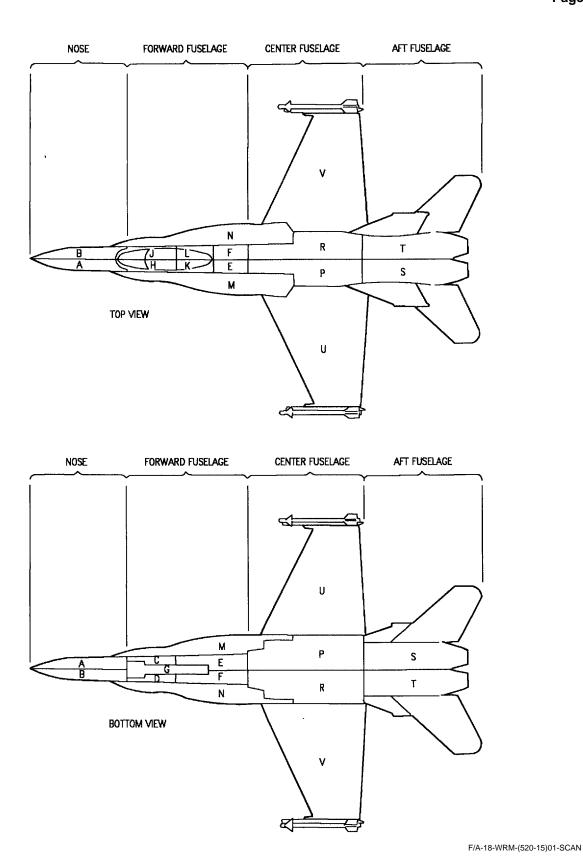


Figure 1. Reference Designation Aircraft Section Identification (Sheet 2)

INTRODUCTION

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

WIRING REPAIR MANUAL (WRM) FORMAT

Reference Material

None

Record of Applicable Technical Directives

None

1. INTRODUCTION.

- 2. This work package explains the format of the Wiring Repair Manual (WRM) Volumes and description of each of the sections.
- 3. The WRM is a 9 volume set. All of the WRM volumes are referenced to each other to help the technician find the proper wiring data.

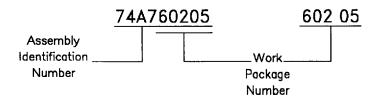
4. WIRING REPAIR MANUAL (WRM) VOLUMES.

5. This manual consists of the following WRM volumes:

WRM VOLUME NUMBER	WRM VOLUME TITLE
A1-F18AC-WRM-000	WIRING REPAIR WITH PARTS DATA, GENERAL WIRING REPAIR PROCEDURES
A1-F18AC-WRM-001	WIRING REPAIR WITH PARTS DATA, GENERAL WIRING REPAIR PROCEDURES
A1-F18AC-WRM-010	WIRING REPAIR WITH PARTS DATA CABLE ASSEMBLIES 74A750001 THROUGH 74A750999
A1-F18AC-WRM-020	WIRING REPAIR WITH PARTS DATA CABLE ASSEMBLIES 74A752001 THROUGH 74A753220
A1-F18AC-WRM-030	WIRING REPAIR WITH PARTS DATA CABLE ASSEMBLIES 74A753221 THROUGH 74A753999
A1-F18AC-WRM-040	WIRING REPAIR WITH PARTS DATA CABLE ASSEMBLIES 74A754001 THROUGH 74A756999
A1-F18AC-WRM-050	WIRING REPAIR WITH PARTS DATA CABLE ASSEMBLIES 74A760001 THROUGH 74A760219
A1-F18AC-WRM-060	WIRING REPAIR WITH PARTS DATA CABLE ASSEMBLIES 74A760220 THROUGH 74A761999
A1-F18AC-WRM-070	WIRING REPAIR WITH PARTS DATA CABLE ASSEMBLIES 74A770001 THROUGH 74A779999, 74R794300 THROUGH 74R799999 AND MIS CELLANEOUS CABLE ASSEMBLIES

6. WIRING REPAIR MANUAL (WRM) VOLUME FORMAT.

- 7. Figure 1 shows how each of the WRM volumes are laid out and the relationship of each WRM volume to the other WRM volumes.
- a. The electrical repair procedures volume (A1-F18AC-WRM-000) is arranged in numerical work package number.
- b. The cable or wiring assembly work packages found in volume A1-F18AC-WRM-010 through A1-F18AC-WRM-070 are numbered by the last five digits of each McDonnell Douglas (CAGE 76301) cable assembly or wiring assembly number. See example 1.
- c. Work packages 002 00 through 002 04 are common in all volumes of A1-F18AC-WRM-000 through A1-F18AC-WRM-070.



F/A-18-WRM-(500-7)01-CATI

Example 1. Work Package Number

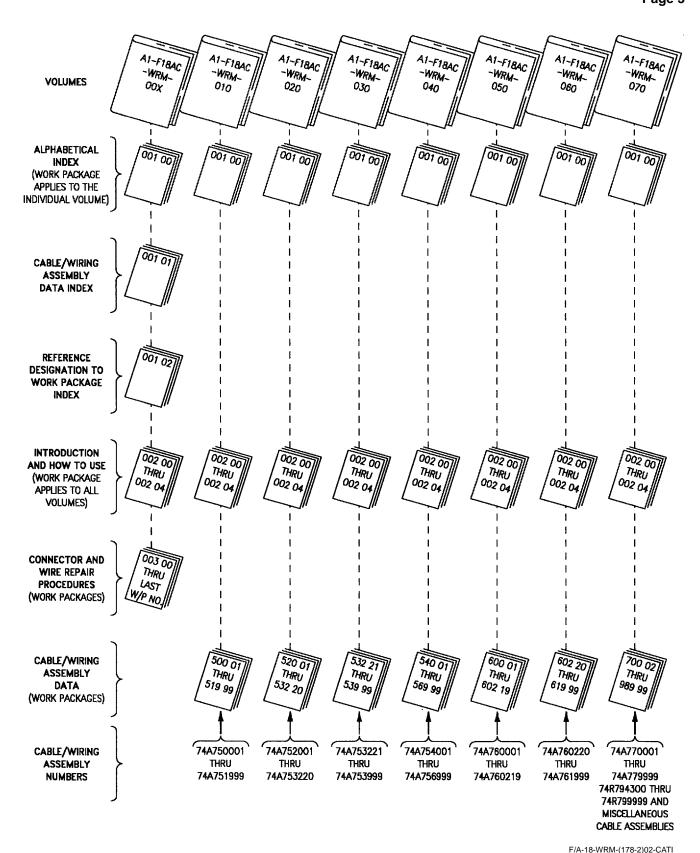


Figure 1. A1-F18AC-WRM-000 thru A1-F18AC-WRM-070 Volume Format

8. MAJOR SECTIONS OF THE WRM VOLUMES.

9. The WRM volumes are divided into six major groups of work packages as listed below:

ALPHABETICAL INDEX

CABLE/WIRING ASSEMBLY DATA INDEX

REFERENCE DESIGNATION INDEX

INTRODUCTION AND HOW TO USE

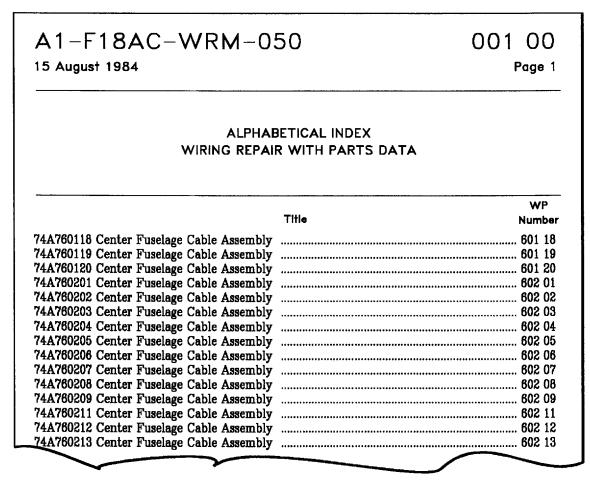
CONNECTOR AND WIRE REPAIR

PROCEDURES

CABLE/WIRING ASSEMBLY DATA

10. ALPHABETICAL INDEX. See figure 2.

- 11. Each volume has an alphabetical index (WP001 00) in the front of each manual. The alphabetical index is an alphanumeric listing of the titles and the corresponding work package numbers for that volume.
- a. TITLE. The title of the work packages found in that volume.
- b. WP NUMBER. The work package number that corresponds to the titles in that volume.



F/A-18-WRM-(520-19)02-CATI

Figure 2. Typical Alphabetical Index

12. CABLE/WIRING ASSEMBLY DATA INDEX. See figure 3.

- 13. The cable/wiring assembly data index (WP001 01) is found in A1-F18AC-WRM-000 only. It is an alphanumeric listing of the assembly identification numbers and the corresponding WRM volume and work package number for each cable/wiring assembly.
- a. ASSEMBLY IDENTIFICATION. The assembly identification is a listing for volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070. See WP002 01 for definition of assembly identification number.

- b. CABLE ASSEMBLY TITLE. The title of the cable/wiring assembly data work package.
- c. A1-F18AC-WRM (VOLUME NUMBER). The volume number of the cable/wiring assembly data of that assembly.
- d. WORK PACKAGE NUMBER. The work package number of the cable/wiring assembly data work package of that assembly.

I-F18AC-WRM-000					
			Page		
CAE	BLE/WIRING ASSEMBLY DAT	A INDEX (Continued))		
ASSEMBLY IDENTIFICATION	CABLE ASSEMBLY TITLE	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAG NUMBER		
74A760111	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 11		
74A760112	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 12		
74A7 60113	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 13		
7 4 A760116	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 16		
74A760117	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 17		
7 4 A760118	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 18		
7 4 A760119	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 19		
74A760120	CENTER FUSELAGE CABLE ASSEMBLY	-050	601 20		
74A760201	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 01		
74A760202	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 02		
74A760203	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 03		
74A760204	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 04		
74A760205	CENTER FUSELAGE CABLE ASSEMBLY	-050	602 05		

F/A-18-WRM-(180-2)02-CATI

Figure 3. Typical Cable/Wiring Assembly Data Index

14. REFERENCE DESIGNATION TO WORK PACKAGE INDEX. See figure 4.

- 15. The reference designation to work package index (WP001 02) is found in A1-F18AC-WRM-000 only. It is an alphanumeric listing of the reference designation and the corresponding volume number, work package number model, and assembly identification number.
 - a. REFERENCE DESIGNATION. See WP002 02.
- b. A1-F18AC-WRM (VOLUME NUMBER). The volume number of the cable/wiring assembly data work

packages or connector repair procedures that contains the corresponding reference designation.

- c. WORK PACKAGE NUMBER. The work package number of the part and wire data work package or connector repair procedures.
- d. MODEL. The model is only listed for volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070 for the corresponding reference designation.
- e. ASSEMBLY IDENTIFICATION. The assembly identification is a listing for volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070. See WP002 01 for definition of assembly identification number.

1-F18AC-	-WRM-000			001 (
				Page
RE	FERENCE DESIGNA	TION TO WORK F	PACKAGE IN	DEX
REFERENCE DESIGNATION	A1-F18AC-WRM (VOLUME NUMBER)	WORK PACKAGE NUMBER	MODEL	ASSEMBLY IDENTIFICATION
22K-D055	-030	536 12	F	74A753612
22K-D055	-030	537 11	TF	74A753711
22K-D055	-030	537 12	TF	74A753712
22K-D168	-070	700 04	F	74A770004
22K-D168	~070	705 04	TF	74A770504
22K-D169	-070	705 04	TF	74A770504
22K-E001	-070	720 07	F	74A772007
22K-E001	-070	725 07	TF	74A772507
22K-E038	-070	720 07	F	74A772007
22K-E038	-070	725 07	TF	74A772507
22K-E039	-070	720 07	F	74A772007
22K-E039	-070	725 07	TF	74A772507
22K-E144	-070	720 07	F	74A772007
22K-E144	-070	725 07	TF	74A772507
22K-E145	-070	720 07	F	74A772007
22K-E145	-070	725 07	TF	74A772507
22K-E158	-070	720 07	F	74A772007
22K-E158	-070	725 07	TF	74A772507
22K-E160	-070	720 07	F	74A772007
22K-E160	-070	725 07	TF	74A772507
22K-E175	-070	720 07	F	74A772007
22K-E175	070	725 07	TF	74A772507

F/A-18-WRM-(181-2)02-CATI

Figure 4. Typical Reference Designation to Work Package Index

16. INTRODUCTION AND HOW TO USE.

17. The introduction is used to orient the technician to the wiring repair manual. It is divided into 5 work packages as listed below:

INTRODUCTION	WP002 00
PART IDENTIFICATION AND	
WIRING INFORMATION	WP002 01
EXPLANATION OF REFERENCE	
DESIGNATION AND AIR-	
CRAFT SECTION DESIGNATION	
SYSTEM	WP002 02
MANUAL FORMAT	WP002 03
HOW TO USE MANUAL	WP002 04

18. CONNECTOR AND WIRE REPAIR PROCEDURES WORK PACKAGES.

19. The connector and wire repair procedures are contained in volume A1-F18AC-WRM-000. The procedures cover repair of connectors and general aircraft wiring. The individual work package provides a list of support equipment required, list of materials required, and repair procedures to do an electrical repair.

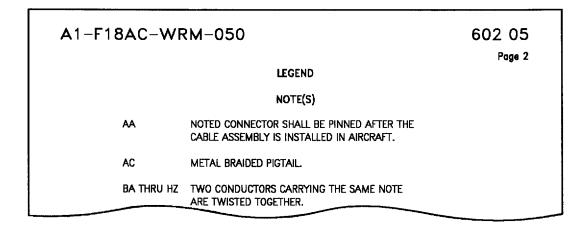
20. CABLE/WIRING ASSEMBLY DATA WORK PACKAGES.

21. Each cable/wire assembly work package contains a title page, legend page, parts list and wire list.

- 22. **LEGEND PAGE.** See figure 5.
- 23. Each legend page may contain general note(s), use on code(s) and note(s).
- 24. GENERAL NOTE(S). General note(s) appear first, and are always numbered. They contain information applicable to the parts list, the wire list, or the complete assemblies. These notations are always applicable for all of the aircraft identified on the work package title page. General note(s) explanations appear on page 2 of Cable and Wiring Assembly Work Packages for volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070.
- 25. USE ON CODE(S). Use on codes are two letter notes used to identify production and retrofit aircraft

effectivities within the assembly. These notations are used to indicate to the technician, those part(s) and or wire(s) that are not applicable to all of the aircraft identified on the work package title page. Use on Code explanations appear on page 2 of Cable and Wiring Assembly Work Packages for volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070.

26. NOTE(S). Notes define two letter notes found in the note column of the part and wire lists. These notes are used to signify special instructions within the parts and wire table lists. Explanations of note(s) appear on page 2 of Cable and Wiring Assembly Work Packages for volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070.



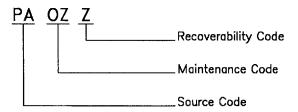
F/A-18-WRM-(182-2)02-CATI

Figure 5. Typical Legend Page

27. **PARTS LIST.** See figure 6.

- 28. Each aircraft cable assembly and wiring assembly work package has a parts list. The parts list contains a list of all the parts that are applicable to the cable assembly or a panel wiring assembly except terminals, splices, contacts and sealing plugs. To find part number information for terminals, splices, contacts, and sealing plugs refer to the applicable repair work package in the A1-F18AC-WRM-000 manual. Only parts with a quantity of one or more or reference (REF) items will appear on this list. See figure 6 for an example of work package parts list. A detailed explanation of each parts list column is below:
- a. REFERENCE DESIGNATION. Reference designations are combinations of letters and numbers used to identify electrical parts located on the aircraft. These reference designations appear in the reference designation column of the parts list. See WP002 02.
- b. PART NUMBER. The part number column gives the manufacturer's part number.
- c. DESCRIPTION. Manufacturer's codes are shown in the description column in parentheses after the nomenclature for the items. These codes are per the Commercial and Government Entity (CAGE) Handbook H4/H8 Series. No code or name indicates the item is a government standard part.
- (1) Converted Part Numbers. When a part number contains dashes between letters, or letters and numbers or punctuation marks or symbols, the part number is converted as explained in Cataloging Manual M1-6. The converted part number is shown in the part number column and the nonconverted part number is shown in the description column.
- (2) Parts Relationship. Detail parts are indicated by indention under the assembly they are used in.

- d. QUANTITY (QTY). Quantity Column gives the amount of each item to be used on cable assembly and panel assembly. The as required (A/R) items will not appear in the Parts List.
- e. USE ON CODE. For an explanation of the use on code column, see paragraph 25. No entry in the use-on column indicates parts are applicable to all configurations supported by the parts list. An asterisk (*), in the use-on column, identifies alternate parts or equivalent parts. An alternate part may be used when the preferred part is not available. The asterisk is omitted for the preferred part. Equivalent parts are fully interchangeable. No equivalent part is preferred over another. All equivalent parts are identified by asterisks.
- f. SOURCE, MAINTENANCE AND RECOVER-ABILITY (SM&R) CODE. See example 2. The codes in this column are those assigned by the customer at times of Provisioning. NAVAIRINST 4423.3 SERIES and NAVSUPINST 4423.14 SERIES contain code definitions. A dash (-) is shown in the SM&R Code Column when no code has been assigned. The Aviation Supply Office P2300 series publication is to be used for the most current SM&R Code assignment information if doubt exists as to the validity of any SM&R Code listed in an IPB. Refer to figure 7 for SM&R Code explanations.
- (1) Source Code. The Source Code is used to indicate the manner of acquiring items for maintenance.
- (2) Maintenance Code. The Maintenance Code is the third and the fourth position of the SM&R Code. The third position is used to indicate the maintenance level authorized to remove or replace a component. The fourth position is used to authorize what level a component is repairable.
- (3) Recoverability Code. The Recoverability Code is used to indicate the disposition action for unserviceable items



F/A-18-WRM-(500-8)01-CATI

Example 2. Source, Maintenance and Recoverability (SM&R) CODE

g. CLOCK DEGREE (CLK DEG). The Clock Degree column indicates the angle in degrees between the connector keyway, and the direction of the angled cable clamp as viewed clockwise from the face of the connector.

h. NOTES. The notes column is used to indicate notes. For an explanation see paragraph 26.

A1-F18AC-WRM-050 602 05 Page 4 **PARTS LIST** USE NOT REFERENCE **SM&R** CLK PART NUMBER DESCRIPTION QTY ON DESIGNATION DEG CODE (CAGE) CODE 74A760205-9EDA CABLE ASSY (76301)10P-P008 270 MS27467T11B98S .CONNECTOR, PLUG **PAOZZ** 1 74A895602-2144 .BAND, MARKER (76301) MDOZZ 1 MS27663B10-2 ADAPTER, CABLE PAOZZ 13P-P004 20 MS27467T9B35S .CONNECTOR, PLUG 1 **PAOZZ** 74A895602-2149 .BAND, MARKER (76301)1 MDOZZ MS27663B8-2 **JADAPTER, CABLE** 1 PAOZZ 2P-P011 MS27467T11B98S .CONNECTOR, PLUG PAOZZ 74A895602-2268 .BAND, MARKER (76301)1 MDOZZ MS27663B10-1 ADAPTER, CABLE 1 PAOZZ 2P-P012 MS27467T9B35S .CONNECTOR, PLUG 1 PA077 74A895602-2151 BAND, MARKER (76301)1 MDOZZ MS27663B8-1 .ADAPTER, CABLE PAOZZ 2S-P023 MS24523-26 SWITCH, TOGGLE REF PA0ZZ 74A895602-2503 .BAND, MARKER (76301)MDOZZ 1 22P-M008 MS27467T9B35S .CONNECTOR, PLUG 1 PA0ZZ 74A895602-2237 (76301).Band, Marker 1 MDOZZ G7057-9-NF .ADAPTER, CABLE (06324)1 PAOZZ (76301 SPEC ST5M1500B9) S1844-03A34D .ADAPTER, CABLE (07418)1 PAOZZ (76301 SPEC ST5M1500B9) 900-513-4108-55 PAOZZ .ADAPTER, CABLE (31461)1 (76301 SPEC ST5M1500B9) 22P-M009 MS27467T9B35S ,CONNECTOR, PLUG PAOZZ 90 74A895602-2238 .BAND, MARKER (76301)MDOZZ 1 G7056-9-NF .ADAPTER, CABLE 1 PA0ZZ (06324)(76301 SPEC ST5M1501B9) S1844-03R59D .ADAPTER, CABLE (07418)1 PA0ZZ (76301 SPEC ST5M1501B9) 900-513R4108-55 (31461)1 PAOZZ ADAPTER, CABLE (76301 SPEC ST5M1501B9) 270 22P-P005 MS27467T9B35S .CONNECTOR, PLUG PA0ZZ 74A895602-2153 .BAND, MARKER (76301)MDOZZ 1 MS27663B8-2 ADAPTER, CABLE PAOZZ 1 22P-P012 MS27467T9B35S .CONNECTOR, PLUG 1 PAOZZ 74A895602-2154 BAND, MARKER (76301)1 MDOZZ MS27663B8-1 ADAPTER, CABLE 1 PAOZZ 22P-R006 MS27467T9B35S .CONNECTOR, PLUG 270 PAOZZ 1 74A895602-2236 BAND, MARKER (76301)1 MDOZZ MS27663B8-2 ADAPTER, CABLE PA0ZZ 22S-P032 MS24523-26 .SWITCH, TOGGLE REF PA0ZZ 74A895602-2502 .BAND, MARKER (76301)1 MDOZZ

	SOURCE			MAINTENANCE				
				REMOVE/REPLACE		REPAIR		
	1st POSITION 2nd POSITION		2nd POSITION		3rd POSITION		4th POSITION	
		A	STOCKED		REPLACE OR			
		8	INSURANCE BUY	0	USE AT ORGANIZATIONAL LEVEL	Z	NO REPAIR (CONSUMABLE)	
Р		С	CURE-DATED ITEM	1				
F	PROCURE	D	INITIAL OUTFITTING	F	REPLACE OR USE AT IMA LEVEL INTERMEDIATE AFLOAT		RECONDITION BY ADJUSTMENT, CALIBRATION, LUBRICATION, PLATING, ETC.	
		Ε	GSE/STOCKED	H G	Intermediate ashore Intermediate afloat/ Ashore	В		
		F	GSE/NOT STOCKED					
		G	SUSTAINED SUPPORT					
к	REPAIR KIT	D	DEPOT			0	REPAIR AT ORGANIZATIONAL LEVEL	
, N	COMPONENT	F	ORGANIZATIONAL/IMA		REPLACE	<u> </u>		
		В	вотн кпз		OR USE	F	REPAIR AT IMA LEVEL	
M	MANUFACTURE	0 F H	ORGANIZATIONAL INTERMEDIATE AFLOAT INTERMEDIATE ASHORE		AT DEPOT	Н	INTERMEDIATE ASHORE INTERMEDIATE ASHORE INTERMEDIATE AFLOAT/ASHORE	
^	ASSEMBLE	G D	INTERMEDIATE AFLOAT/ASHORE DEPOT	L	SPECIALIZED IMA REPAIR SITE		THE ENTER OF THE PARTY OF THE P	
		A	USE NEXT HIGHER ASSEMBLY	<u> </u>		D	REPAIR AT DEPOT OR COMMERCIAL	
X	MISCELLANEOUS	В	OBTAIN FROM SALVAGE OR ONE TIME BUY	z	NOT AUTHORIZED TO BE REMOVED OR REPLACED		DE OT OUT COMMENCE	
		С	DIAGRAM-SCHEMATICS, INSTALLATION DRAWINGS] -		L	REPAIR AT SPECIALIZED IMA SITE	

	RECOVERABILITY		SERVICE OPTION				
	5th POSITION		6th POSITION				
z	NON-REPAIRABLE ITEM. CONDEMN AND DISPOSE AT LEVEL INDICATED IN 3rd POSITION.	1 2 3	APPLIES TO ENGINES ONLY. IDENTIFIES THE HIGHEST (1) TO LOWEST (3) LEVEL OF MAINTENANCE WHICH CAN REPLACE (3rd POSITION OF SMR CODE) THE ITEM.				
0	REPAIRABLE ITEM. CONDEMN AND DISPOSE AT ORGANIZATIONAL LEVEL	6	NORMALLY PROCURED COMMERCIAL BUT ORGANIC CAPABILITY EXISTS AT NARF FOR EMERGENCY STOP GAP REQUIREMENTS.				
	REPAIRABLE ITEM. CONDEMN AND DISPOSE AT IMA LEVEL INDICATED	E	"I" LEVEL REPAIR NOT AUTHORIZED BUT "I" LEVEL MUST VALIDATE FAILURE PRIOR TO BCM TO DEPOT.				
F	INTERMEDIATE AFLOAT INTERMEDIATE ASHORE	J	DESIGNATES INTER-SERVICE DLR, PER NAVY MP CONSIDERED COMPLETELY REPAIRABLE BELOW DEPOT LEVEL.				
G	INTERMEDIATE AFLOAT/ASHORE	8	SAME AS "J" ABOVE EXCEPT USED FOR ENGINES ONLY. APPLIES TO 2nd DEGREE ENG. MAINTENANCE LEVEL.				
D	REPAIRABLE ITEM. CONDEMN AND DISPOSE AT DEPOT OR CONTRACTOR FACILITY.	9	SAME AS "J" ABOVE EXCEPT USED FOR ENGINES ONLY. APPLIES TO 3rd DEGREE ENG. MAINTENANCE LEVEL.				
	REPAIRABLE ITEM. CONDEMN AND DISPOSE AT	Р	DENOTES ITEMS WHICH ARE PROGRESSIVELY REPAIRED AT ORG, INT, AND DEPOT LEVELS. BLANK IF NO INT. REPAIR IS AUTHORIZED BETWEEN 0 & D LEVEL.				
	SPECIALIZED IMA REPAIR SITE.	N	ASSIGNED TO XB SOURCE CODE AND INDICATES ITEM IS PROCURED LOCALLY. NOT STOCKED IN THE SUPPLY SYSTEM.				
A	SPECIAL HANDLING REQUIRED. CONTACT ITEM MANAGER FOR DISPOSAL INSTRUCTIONS.		ASSIGNED TO TRAINING DEVICES WITH SOURCE CODE OF "PD." INDICATES ITEM IS NOT A PROCURABLE SPARE, WSN IS ASSIGNED ONLY TO PERMIT VISIBILITY OF REPAIR PART RELATIONSHIP.				

29. **WIRE LIST.** See figure 8.

- 30. Each aircraft cable assembly and wiring assembly work package has a wire list. The wire list contains a list of all wires that are applicable to cable assembly or wiring cable assembly. Each wire appears twice in this list. This is a result of the wire being listed once with the FROM REFERENCE DESIGNATION listed first and listed a second time with the TO REFERENCE DESIGNATION listed first. Spare pins for each reference designation (if applicable) will also be listed.
- a. REFERENCE DESIGNATION. Reference designations are combinations of letters and numbers used to identify electrical parts located on the aircraft. The reference designation columns that appear in the wire list gives the first and second terminations of each wire. The first reference designation column, is sorted in alphanumerical order. The second reference designation column is not sorted. For explanation of the reference designation, see paragraph 28a, and WP002 02.
- b. PIN. The pin columns give the specific pin letter(s) or pin number(s) for each end of the wire listed. Lower case letters will be indicated by an ampersand (&) preceding an upper case letter.
- c. REPAIR WP. The repair WP column contains one of three types of information, repair work package number, NOTE, and GEN NT. Repair work package number in repair WP column indicates the work package in the A1-F18AC-WRM-000 which contains the repair procedures for that connector and pin. NOTE in the repair WP column means to see the note column

on the far right hand side of the wire list, see paragraph 26. GEN NT in the repair WP column means to see the general note(s) which are found on the legend page(s) towards the front of the work package, see paragraph 24.

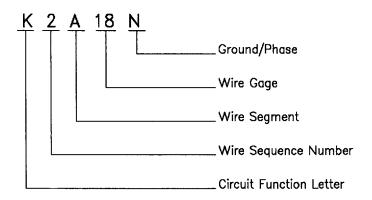
- d. USE ON CODE. For an explanation of the use on code column, see paragraph 25.
- e. WIRE IDENTIFICATION. The wire identification column lists the wire number. See example 3.
- (1) Circuit Function Letter. The circuit function letter indicates the circuit within a particular system.
- (2) Wire Sequence Number. The wire number indicates the numerical sequence of this wire in a particular circuit.
- (3) Wire Segment. The wire segment is a letter designation that is used to identify a particular wire in a series used within a circuit.
- (4) Wire Gage. The wire gage gives the American Wire Gage (AWG) size of wire. A shield is represented by SH in the wire gage.
- (5) Ground/Phase. The ground/phase suffix letter (when applicable) identifies a particular function of wir segment. An explanation of the suffix letters are as follows:

A = A wire that carries phase A power.

B = A wire that carries phase B power.

C = A wire that carries phase C power.

N = A ground wire.



F/A-18-WRM-(500-9)01-CATI

Example 3. Wire Identification

- f. LG. The lg column indicates wire length (in inches) for each of the wires. The wire length represents the minimum length a wire can be cut and still reach from pin to pin.
- g. WIRE TYPE. The wire type column gives a numerical designation (Code). To convert this code to a part number and type of wire, see A1-F18AC-WRM-000, WP004 00.
- h. NOTE. For an explanation of the Note Column, see paragraph 26.

A1-F18AC-WRM-060 602 25 Page 19 WIRE LIST FROM WIRE TO USE ON REFERENCE REPAIR REPAIR REFERENCE PIN NUMBER LG TYPE PIN DESIGNATION WP **DESIGNATION** WP 52J-R102 **SPAREPIN** 52J-R102 8 WP602 07 036 00 52J-R102 9 WP602 07 036 00 52J-R102 10 WP602 07 036 00 52J-R102 11 WP602 07 036 00 52J-R102 12 WP602 07 036 00 52J-R102 13 WP602 07 036 00 52J-R102 14 036 00 WP602 07 52J-R102 15 **SPAREPIN** 52J-R102 16 WP602 07 036 00 52J-R102 17 WP602 07 036 00 52J-R102 18 168 00 52P-F005A 18 201 00 **22CR** 869 TF Q234C 52J-R102 19 WP602 07 036 00 52J-R102 20 WP602 07 036 00 21 52J-R102 WP602 07 036 00 52J-R102 22 036 00 WP602 07 52J-R102 23 036 00 WP602 07 52J-R102 24 **SPAREPIN** 25 52J-R102 WP602 07 036 00 52J-R102 26 **SPAREPIN** 52J-R102 27 168 00 869 52P-F005A 201 00 TE Q233C 26AL 28 52J-R102 WP602 07 036 00 29 52J-R102 036 00 WP602 07 30 52J-R102 WP602 07 036 00 52J-R102 31 **SPAREPIN** 52J-R102 32 **SPAREPIN** 52J-R102 33 **SPAREPIN** 52J-R102 34 **SPAREPIN** 52J-R102 35 SPAREPIN 36 52J-R102 WP602 07 036 00 37 168 00 14 52J-R102 Q232C 22CR 869 52P-F005A 201 00 TE 38 52J-R102 WP602 07 036 00 52J-R102 39 WP602 07 036 00 40 52J-R102 **SPAREPIN** 41 52J-R102 WP602 07 036 00 52J-R102 42 **SPAREPIN** 52J-R102 43 WP602 07 036 00 52J-R102 44 **SPAREPIN** 52J-R102 45 **SPAREPIN** 46 52J-R102 SPAREPIN 52J-R102 47 168 00 Q231C 26AL 869 52P-F005A 13 201 00 ΤE 52J-R102 48 WP602 07 036 00

f/A-18-WRM-(184-2)02-CATI

1 October 1993

INTRODUCTION

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

HOW TO USE MANUAL

Reference Material

Wiring Diagrams	WDM-000
Wiring Repair With Parts Data, General Wiring Repair Procedures	WRM-000
Alphabetical Index	WP001 00
Cable/Wiring Assembly Data Index	WP001 01
MS3450 and MS3459 (MIL-C-5015) Connector Repair	WP157 00
Protective Boot Installation for Environmental Type Connectors With Metal Cable Clamps	WP080 00
Reference Designation and Aircraft Section Designation System, Explanation of	WP002 02
Reference Designation to Work Package Index	WP001 02
Repair of Single Conductor Non - Shielded Wire	WP026 00
Wire Type List	WP004 00
Wiring Repair With Parts Data Cable Assemblies 74A750001 Through	
74A750999	WRM-010
75A753211 Cable Assembly, Forward Fuselage	WP532 11

Record of Applicable Technical Directives

None

1. INTRODUCTION.

- 2. This manual can be used with wiring diagrams contained in the A1-F18AC-WDM-000 Wiring Diagrams Manual. The wiring diagrams manual (WDM) provides component locations, and wiring diagrams to isolate faulty wiring. When a maintenance problem has been isolated to an aircraft cable or wiring assembly, the WRM volumes are used to repair the problem.
- 3. A1-F18AC-WRM-000 and A1-F18AC-WRM-001 are used to repair connectors and wiring. A1-F18AC-WRM-010 through A1-F18AC-WRM-070 provide part ordering and part replacement information and wiring hookup data.
- 4. Wiring repair is made up basically of two types of repair as listed below:

CONNECTOR REPAIR WIRE REPAIR

5. **CONNECTOR REPAIR.** See figure 1.

- 6. To repair a connector, continue with instructions below:
- a. Using the A1-F18A()-WDM-000 Wiring Diagrams Manual, isolate the problem to an electrical connector and pin on a cable or wiring assembly. Note the reference designation of the connector.

NOTE

Items other than connectors, such as switches, terminal blocks, relays, etc., and their termination points, found inside or outside of WRAs, may also be noted.

b. Find the reference designation in the reference designation to work package index (WP001 02) of the A1-F18AC-WRM-000 volume. The reference designations are in alphanumerical order. Note the assembly identification number, volume number, and work pack-

age number listed for the required reference designation. See figure 1, How To Use Manual For Connector Repair.

7. **WIRE REPAIR.** See figure 2.

- 8. To repair a wiring problem, continue with instructions below:
- a. Using the A1-F18A()-WDM-000 Wiring Diagrams Manual, isolate to an electrical wiring problem. Note the cable/wiring assembly identification marker of the cable/wiring assembly.
- b. Find the assembly identification number in the cable/wiring assembly data index (WP001 01). The assembly identification numbers are sorted in numerical order. Note the cable assembly title, work package number, and volume number for the required assembly identification number. See figure 2, How To Use Manual For Wiring Repair.

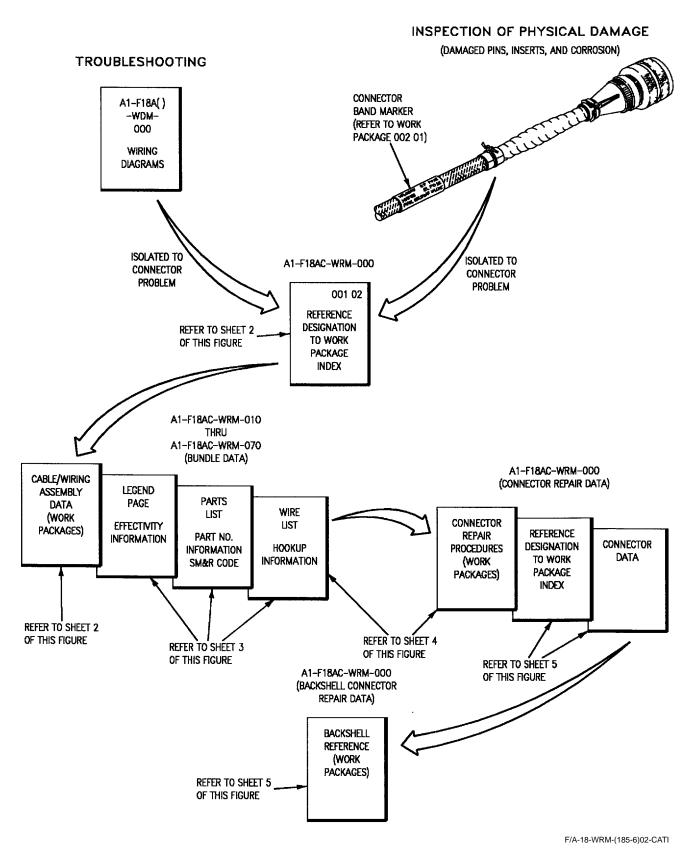


Figure 1. How to Use Manual for Connector Repair (Sheet 1)

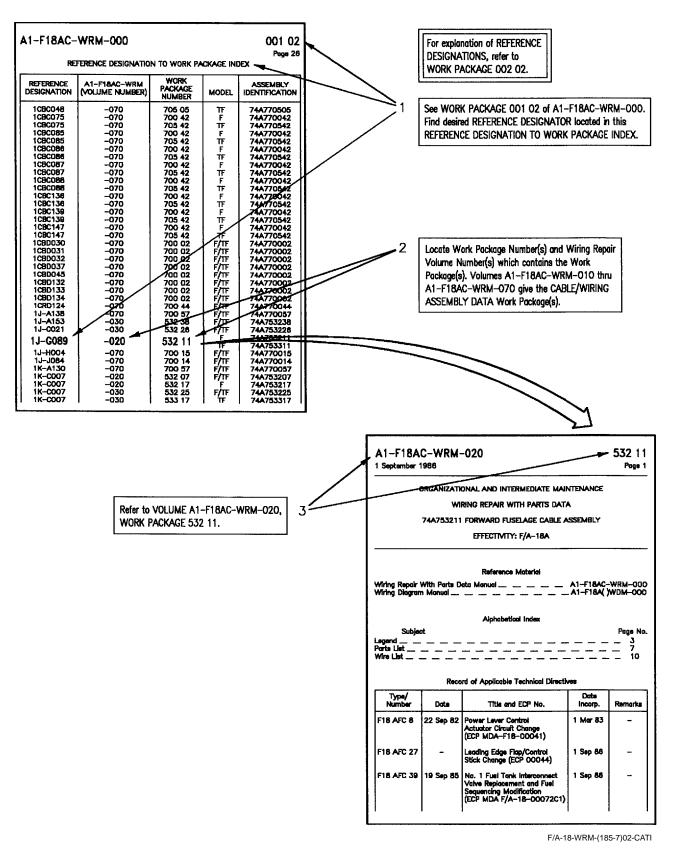


Figure 1. How to Use Manual for Connector Repair (Sheet 2)

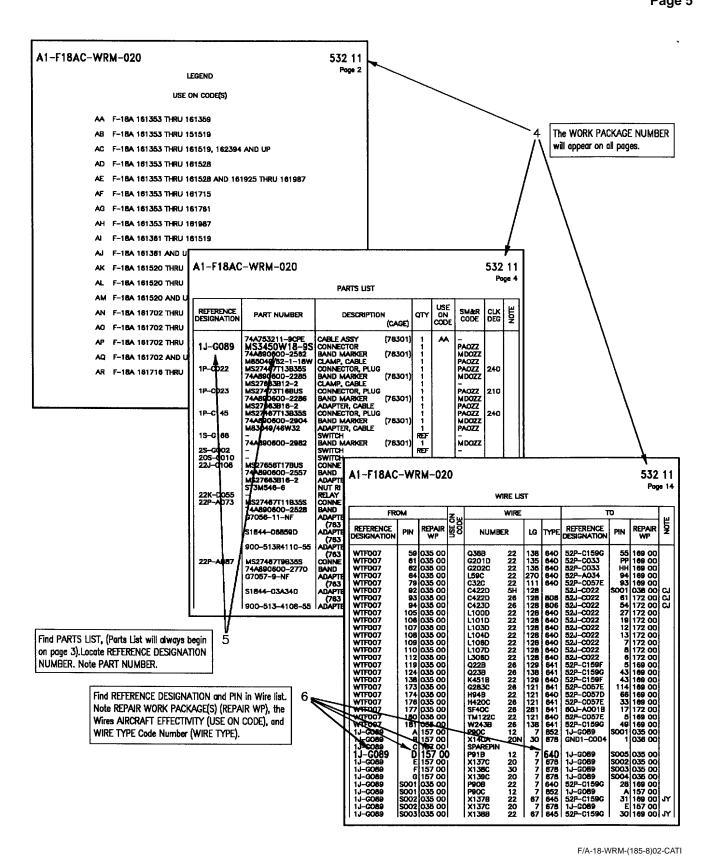
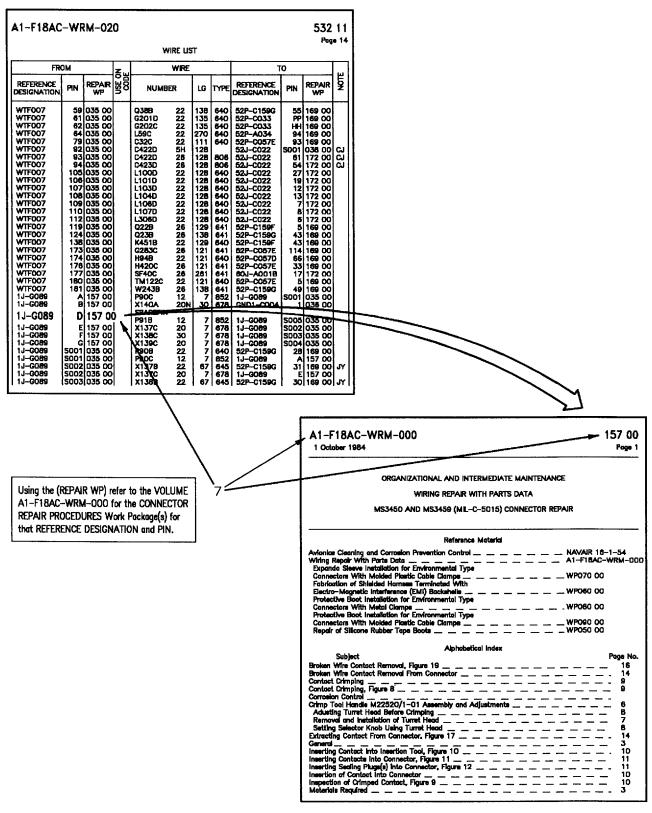


Figure 1. How to Use Manual for Connector Repair (Sheet 3)



F/A-18-WRM-(185-9)02-CATI

Figure 1. How to Use Manual for Connector Repair (Sheet 4)

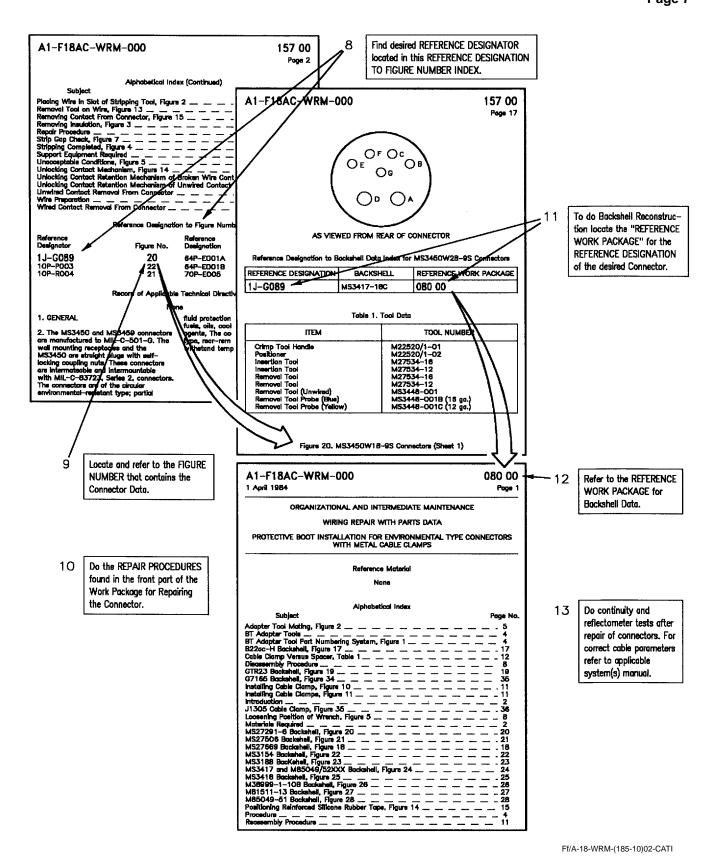


Figure 1. How to Use Manual for Connector Repair (Sheet 5)

A1-F18AC-WRM-000

WIRING

REPAIR

(WORK PACKAGES)

INSPECTION OF PHYSICAL DAMAGE **TROUBLESHOOTING** CABLE/WIRING DAMAGED WIRE -**ASSEMBLY** IDENTIFICATION A1-F18A() MARKER -WDM-(REFER TO WORK 000 PACKAGE 002 01) W5221 WIRING DIAGRAMS ISOLATED TO ISOLATED TO A1-F18AC-WRM-000 WIRING WIRING **PROBLEM** PROBLEM 001 01 CABLE **ASSEMBLY** INDEX **REFER TO SHEET 2** OF THIS FIGURE A1-F18AC-WRM-010 A1-F18AC-WRM-070 (BUNDLE DATA) CABLE/WIRING LEGEND ASSEMBLY PAGE PARTS DATA WIRE LIST (WORK LIST **EFFECTIVITY** PACKAGES) A1-F18AC-WRM-000 PART NO. INFORMATION HOOKUP INFORMATION INFORMATION SM&R CODE 004 00 WIRE TYPE LIST **REFER TO SHEET 4** REFER TO SHEET 2 OF THIS FIGURE OF THIS FIGURE REFER TO SHEET 3 OF THIS FIGURE A1-F18AC-WRM-000

Figure 2. How to Use Manual for Wiring Repair (Sheet 1)

REFER TO SHEET 4

OF THIS FIGURE

001 00

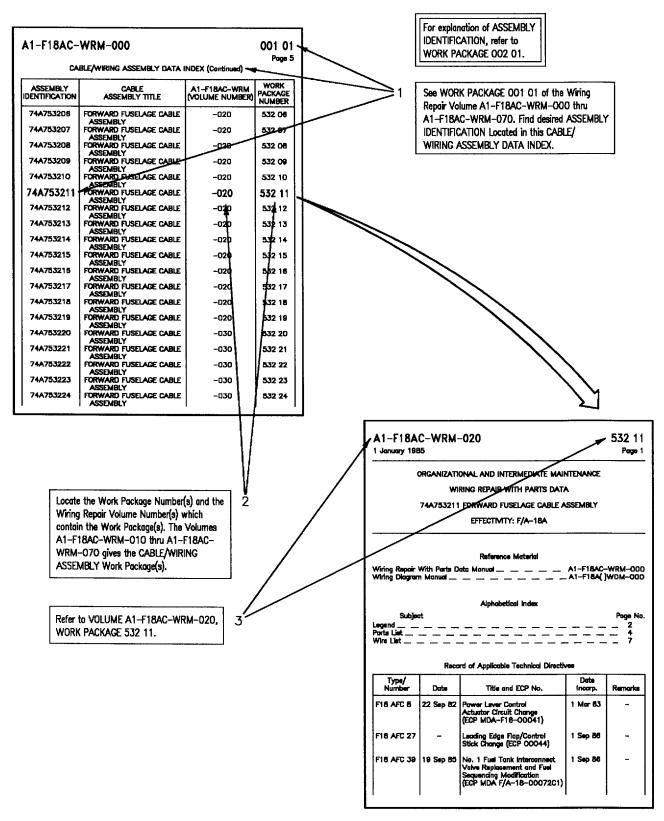
REFER TO SHEET 4

F/A-18-WRM-(186-5)02-CATI

OF THIS FIGURE

ALPHABETICAL

INDEX



F/A-18-WRM-(186-5)02-CATI

Figure 2. How to Use Manual for Wiring Repair (Sheet 2)

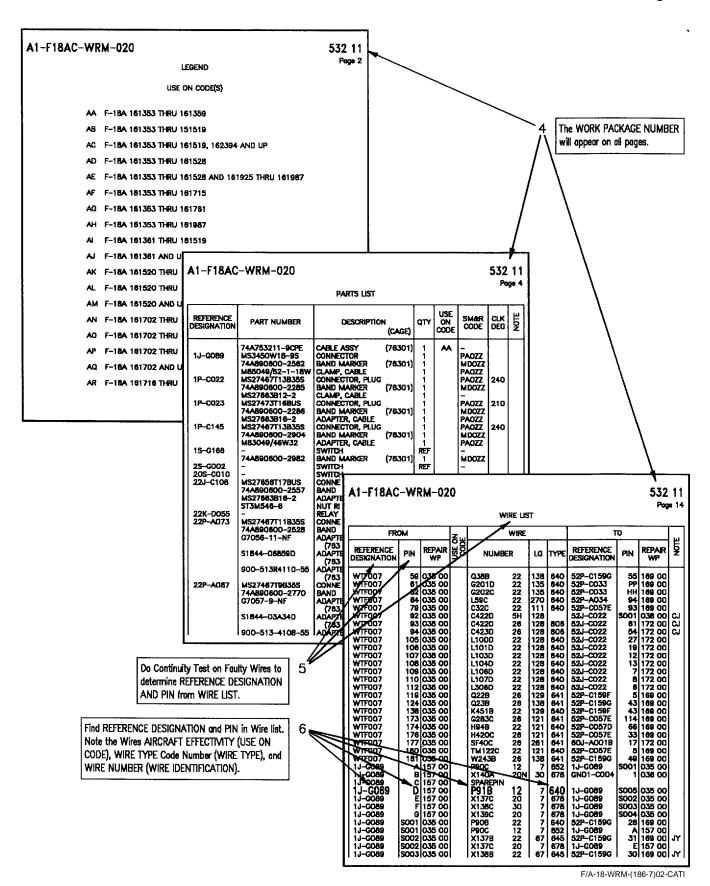
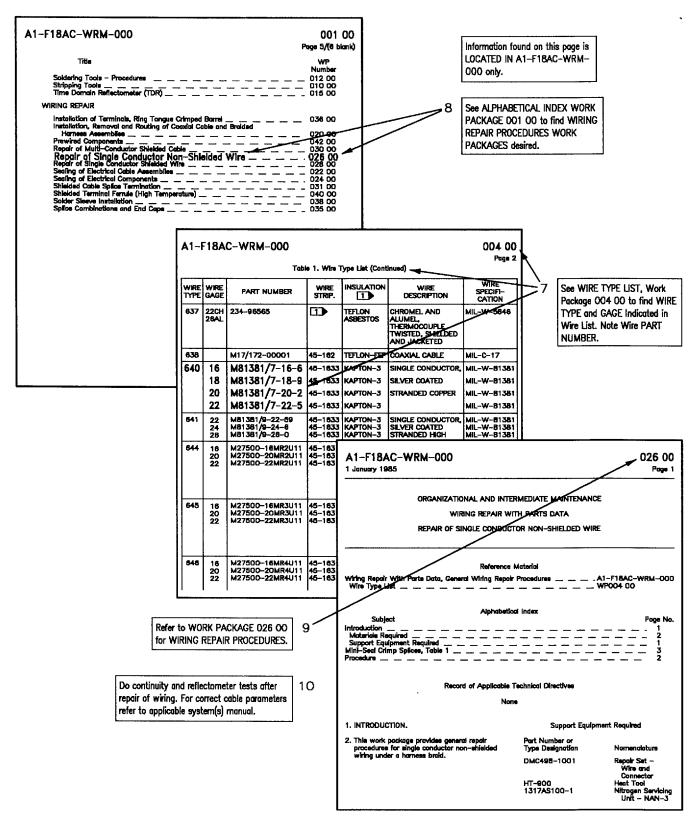


Figure 2. How to Use Manual for Wiring Repair (Sheet 3)



F/A-18-WRM-(186-8)02-CATI

Figure 2. How to Use Manual for Wiring Repair (Sheet 4)

Change 5 - 15 March 2003

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA LIST OF MATERIALS

This WP supersedes WP 003 00, dated 1 October 1993.

Reference Material

None

Alphabetical Index

Subject	Page No
Introduction	1
List of Materials, Table 1	
Table Description	1
Commercial and Government Entity Code (CAGE)	1
Part Name	1
Part Number/Specification	1

Record of Applicable Technical Directives

None

1. INTRODUCTION.

- 2. This work package contains a listing of all consumable items used for wiring and connector repair.
- 3. TABLE DESCRIPTION.
- 4. **PART NAME.** Gives common name of the part.
- 5. **PART NUMBER/SPECIFICATION.** Gives the part number or specification number to use when ordering replacement parts.
- 6. **COMMERCIAL AND GOVERNMENT ENTITY CODE (CAGE).** Is a five position, numeric code used to identify the manufacturer of the part.

Table 1. List of Materials

PART NAME	PART NUMBER/SPECIFICATION	CAGE CODE
ALCOHOL ISOPROPYL BRAID	TT-I-735 GRADE B	81348
Tubular Shield (3/16)	8660	16428
Tubular Shield (5/16)	8661	16428
Tubular Shield (5/32)	8664	16428
Tubular Shield (1/16)	8674	16428
BRUSH		
Acid Swab	H-B-643, TYPE 2, CLASS 1, SIZE 1	81348

PART NAME PART NUMBER/SPECIFICATION CAGE CODE				
CLOTH				
Cheesecloth	CCC-C-440 TYPE 1 CLASS 1	81348		
CAP				
End	TC 4001 CRN (SRC-1)	06090/24011		
End	TC 4003 CRN (SRC-2)	06090/24011		
End	TC 4005 CRN (SRC-3)	06090/24011		
End	D300-12	06090		
End	D300-18	06090		
End	D300-19	06090		
End	TAK 1/8	06090		
End	TAK 3/16	06090		
End	6039-37-P	06090		
COMPOUND				
Cleaning	FREONTF	73925		
Cleaning	MMS409	76301		
Sealing	MIL-S-8516 TYPE1 CLASS3	81349		
Sealing	MIL-S-83430 CLASSA-4	83574		
Sealing	MIL-S-83430 CLASS B-1/4	83574		
Sealing	MIL-S-83430 CLASS B-1/2	83574		
CONTACT				
Coax	48-1226-02	02660		
Coax	225790-4	00779		
Coax	225791-8	00779		
Coax	700-168	09922		
Coax	700-170	09922		
Coax	800/34-1	02660		
Coax	M39029/77-428	81349		
Coax	0N089558-2	81349		
Coax	M39029/59-366	81349		
Triax	902-5019	02660		
Triax	902-5020	02660		
Triax	ST5M1503-001S	76301		
Twinax	885-213-001	99447		
Wire	M39029/58-363	81349		
Wire	M39029/63-368	81349		
Wire	M39029/12-149	81349		
Wire	225791-8	00779		
Wire	225790-4	00779		
Wire	M39029/11-145	81349		
Wire	M39029/11-143 M39029/12-148	81349		
Wire	M39029/11-144	81349		
Wire	885-213-001	99447		
Wire	M39029/56-352	81349		
Wire	0N089558-2	98230		
Wire	M39029/31-241	81349		
Wire	M39029/4-110	81349		
Wire	M39029/4-110 M39029/5-115	81349		
Wire	M39029/30-218	81349		
Wire	M39029/30-218 M39029/30-217	81349		

PART NAME PART NUMBER/SPECIFICATION CAGE COD				
CONTACT (Cont.)				
Wire	M39029/29-212	81349		
Wire	M39029/30-219	81349		
Wire	M39029/5-116	81349		
Wire	M39029/18-177	81349		
Wire	M39029/18-177	81349		
Wire	M39029/11-146	81349		
Wire	M39029/12-150	81349		
Wire	M39029/56-353	81349		
Wire	M39029/56-363	81349		
Wire	M39029/57-354	81349		
Wire	M39029/57-357	81349		
Wire	M39029/57-358	81349		
Wire	M39029/58-348	81349		
Wire	M39029/58-380	81349		
Wire	M39029/58-360	81349		
Wire	M39029/56-348	81349		
Wire	M39029/56-351	81349		
Wire	M39029/58-364	81349		
Wire	M39029/4-110	81349		
Wire	M39029/5-113	81349		
Wire	M39029/5-115	81349		
Wire	M39029/30-219	81349		
Wire	M39029/32-242	81349		
Wire	48-1226-02	02660		
Wire	10-407865-310	77820		
Wire	10-407865-320	77820		
Wire	030-2042-008	71468		
Wire	030-2042-009	71468		
Wire	031-1147-010	71468		
Wire	031-1147-011	71468		
CORK				
Ground	No. 10/20	27661		
DEPRESSOR				
Wooden Tongue	GG-D-226 TYPE 1	81348		
ETCHING				
Solution	TETRAETCH20ZBT	17217		
FLOROCARBON				
Lubricant	MS122	18598		
MARKER				
Band	B637-1-500YELLOW			
PLASTIC				
Mold	MS27486-12-1	96906		
PRIMER				
Adhesive	EC1945BA	04963		
SEALANT	MIL-A-46146TY1	81349		
Adhesive	MILA46146TY3	81349		

Table 1. List of Materials (Continued)

PART NAME	PART NUMBER/SPECIFICATION	CAGE CODE
SEALING		
Compound	MILS83430CLASSA-4	83574
Compound	MILS8343CLASSB-1/4	83574
Silicone Varnish	SR98	01139
SEALING PLUGS	Sityo	01137
	MS25251-12	96906
	MS25251-16	96906
	MS27186-1	96906
	MS27187-1	96906
	MS27187-2	96906
	MS27187-3	96906
	MS27187-20	96906
	MS27488-22	96906
	MS27488-20	96906
	MS27488-16	96906
	MS27488-12	96906
	MS27488-32	96906
	MS31187-12	96906
	MS31187-16	96906
	MS31187-20	96906
	MS31187A20	96906
	M81511/15-12	30003
	M81511/15-16	30003
	M81511/15-20	30003
	M81511/15-22	30003
	M81511/39-22	81349
	M83723-28-0	81349
	M83723-28-4	81349
	M83723-28-8	81349
	M83723-28-12	81349
	M83723-28-16	81349
	L24P120-8	76301
	0N089563	76301
	205402-3	00779
SHIELDING		
Ferrule	32805	00779
Ferrule	328052	00779
Ferrule	328053	00779
Ferrule	328054	00779
Ferrule	328055	00779
Ferrule	328056	00779
Ferrule	328057	00779
Ferrule	328058	00779
Ferrule	328058	00779
Ferrule	328060	00779
Ferrule	328061	00779
Ferrule	5M608-12	76301
Ferrule	5M608-13	76301

Table 1. List of Materials (Continued)

PART NAME PART NUMBER/SPECIFICATION CAGE CODE				
SHIELDING (Cont.)				
Ferrule	5M608-14	76301		
Ferrule	5M608-15	76301		
Ferrule	5M608-16	76301		
Ferrule	5M608-17	76301		
Ferrule	5M608-18	76301		
Ferrule	5M608-19	76301		
Ferrule	5M608-20	76301		
Ferrule	5M608-21	76301		
Ferrule	5M608-22	76301		
Jumper	M22795/11-20-5	81349		
Jumper	M22795/11-22-5	81349		
SLEEVE				
Expando	6747095	81851		
Expando	6749085	81851		
Expando	6749305	81851		
Expando	6751245	81851		
Expando	6751255	81851		
Expando	6755315	81851		
Expando	6762015	81851		
Heat Shrink	M23053/5-XXX-0	81349		
Insulation	RNF100 1-8BLACK	06090		
Insulation	M23054/4-XXX-0	06090		
Insulation	MMS-819A	81349		
Shrink	MMS-809	76301		
SLEEVING	WW5-007	70301		
Expandable	6253001	81851		
Expandable	6255001	81851		
Expandable	6262001	81851		
Expandable	6264921	81851		
Expandable	6266001	81851		
Expandable	6270001	81851		
Insulation	M23053/4-XXX-0	81349		
Insulation	M23053/5-108-0	81349		
Insulation	M23053/5-108-0 M23053/5-109-0	81349		
SOLDER	SN60WRMAP2-0-040	81348		
SOLDER	31100 W KIVIAI 2-0-040	01340		
SULDER Sleeve	D100-28	06090		
Sleeve	D100-28 D101-22	06090		
Sleeve	D101-22 D108-0X	06090		
	NAS1745-XX			
Sleeve	NA31/43-AA	80205		
SOLVENT	O. T. (20)	06717		
Trichloroethane 1,1,1	O-T-620	96717		
SPACER	NAS43DD	80205		
Sleeve	NAS1507P	80205		
Sleeve	NAS1057T	80205		
SPLICE	NW G 04024 4 D	0.5000		
Conductor	MIL-S-81824-1 Raychem D436-36	06090		
Conductor	MIL-S-81824-2 Raychem D436-37	06090		

Ta	able 1. List of Materials (Continued)			
PART NAME PART NUMBER/SPECIFICATION CAGE CODE				
SPLICE (Cont.)				
Conductor	MIL-S-81824-3 Raychem D436-38	06090		
Conductor	D-609-XX	06090		
Conductor	34319	00779		
Conductor	34318	00779		
Conductor	34138	00779		
Conductor	327041	00779		
Conductor	2-34318-1	00779		
Conductor	323754	00779		
Conductor	34320	00779		
Conductor	323754-P	00779		
Conductor	324042	00779		
Conductor	327044	00779		
Conductor	324042	00779		
Conductor	35187			
SQUEEZE BOTTLE				
Polyethylene	128SME601170-3			
TAPE				
Hot Spotz	AF100A	62088		
Hot Spotz	AF150A	62088		
Insulation	MIL-I-18746-1.000X.005X36 YDS	81349		
Insulation	MIL-I-23594, TYPE 2, 1/2 In. WIDE	81349		
Insulation	MIL-I-46852, TYPE 2, 1.000 In. RED	81349		
Lacing	MIL-T-43435 TYPE-2 SIZE-3FINISH-C	81349		
Masking	-			
Silicone	MS70T09-S	96906		
Silicone Adhesive Teflon	P-4230	99742		
Silicone Adhesive Teflon	2245-2E	07512		
Silicone Rubber	MIL-I-46852, TYPE 2, 1.000 In. BLK	81349		
Silicone Rubber	604–1	07099		
Silicone Rubber Reinforced	S-5025	07099		
Silicone Rubber Reinforced	S-80	07099		
Tedlar	B637	85480		
Teflon Barrier	62	20999		
Wire Mesh	SC61298	22798		
TERMINALS				
	M7928	81349		
	M7929	81349		
	MS20659	96906		
	MS25036	96906		
	MS25189	96906		
	54575	00779		
	NW21	08869		
	NW22	08869		
	NW23	08869		
TIEDOWN STRAP				
Mini Band	S3175–4	07418		
Plastic	PLT-2S-CP30	06383		
Plastic	PLT-4H-C30	06383		

Table 1. List of Materials (Continued)

	• • • • • • • • • • • • • • • • • • • •	
PART NAME	PART NUMBER/SPECIFICATION	CAGE CODE
TIEDOWN STRAP (Cont.)		
Plastic	SST-2H-C30	06383
Plastic	08402	16956
Plastic	08403	16956
TISSUE		
Optical Lens - Kodax	154-6027	

Change 5 - 15 March 2003

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA WIRE TYPE LIST

Reference Material

None

Alphabetical Index

Subject	Page No.
Cross Reference List of Kapton Insulated To Crosslinked - Tefzel Insulated Wire/Cable, Table 3	17
Cross Reference List of Teflon Insulated To Crosslinked - Tefzel Insulated Wire/Cable, Table 4	19
Insulation Definition, Table 2	17
Wire Type List, Table 1	1

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 253	-	U. S. Navel Reserves A+ Avionics Upgrade (ECP MDA F/A- 18-00560R1)	1 Mar 01	-
F/A-18 AFC 292	-	U. S. Marine Corps Reserves A+ Avionics Upgrade (ECP MDA F/A- 18-00583)	1 Mar 01	-

Table 1. Wire Type List

WIRE	WIRE		WIRE	INSULATION		WIRE SPECIFI-
TYPE	GAGE	PART NUMBER	STRIP.	5	WIRE DESCRIPTION	CATION
A92	20	M22759/34-20-34	45-1610	I.R. ETFE	SINGLE CONDUCTOR, STRANDED SILVER COATED HIGH STRENGTH COPPER, WHITE/ORANGE STRIPE. AIRFRAME WIRE	MIL-W-22759
B09		M17/128-RG400	45-165		COAXIAL CABLE, 50 OHMS	MIL-C-17
B25	22	M25038/3-22-19	45-1610	I.R. ETFE	SINGLE CONDUCTOR, STRANDED NICKEL COATED HIGH STRENGTH COPPER, WHITE, FIRE RESIS- TANT	MIL-W-25038
44		5M9N020-4			BUS BAR	
51		5M9N032-3			BUS BAR	
260		QC343S2211T		NONE	(76301 SPEC 5M592S22C1) I COND. SOLID	QQ-W-343
339		M17/174-00001	45-164	TEFLON-FEP	COAXIAL CABLE	MIL-C-17
368					PREWIRED PIGTAIL (SUPPLIED WITH PART)	
381	12 16 20 22	M22759/7-12-4 M22759/7-16-6 M22759/7-20-2 M22759/7-22-5	45-1501 45-1500 45-1500 45-1500	REINFORCED TEFLON	1 COND. (AWG 4-24)	MIL-W-22759
473	24	5M2022-003	45-1610	TEFLON-FEP	2 CONDUCTOR, STRANDED SILVER COATED COPPER, TWISTED, SHIELDED, 1. CONDUCTOR BLUE 2. CONDUCTOR BLUE/WHITE STRIPE JACKET (BLUE)	MIL-C-17
526	24	M22759/33-24	45-164	I.R. ETFE	SINGLE CONDUCTOR, HIGH STRENGTH, HOOKUP	MIL-W-22759
533	24	M17/176-00002	45-164	TEFLON-TFE	TWIN CONDUCTOR COAX, STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, 77 OHMS	MIL-C-17

Table 1. Wire Type List (Continued)

WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION 5	WIRE DESCRIPTION	WIRE SPECIFI- CATION
548		5M2397-002			TRIAX, HIGH- STRENGTH, 75 OHM	
552	24	M17/113-RG316	45-162	TEFLON-FEP	COAX, 50 OHMS	MIL-C-17
566		5M2551-001			SINGLE FIBER OPTIC CABLE	DOD-C-85045
567		5M2559-001	45-165	TEFLON-FEP	TRIAXIAL CABLE, 95 OHM	MIL-C-17
583	22 24 26	M22759/33-26-0	45-1610	I.R. ETFE	SINGLE CONDUCTOR, STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, HOOKUP WIRE	MIL-W-22759

Table 1. Wire Type List (Continued)

WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION 5	WIRE DESCRIPTION	WIRE SPECIFI- CATION
584	22	M22759/35-22-55	45-1610	I.R. ETFE	SINGLE CONDUCTOR, STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, GREEN/ GREEN STRIP	MIL-W-22759
587	12 16 20 22	M22759/43-12-47 M22759/43-16-67 M22759/43-20-27	45-1610 45-1610 45-1610	I.R. ETFE	SINGLE CONDUCTOR, SILVER COATED COPPER, AIRFRAME WIRE	MIL-W-22759
588	12 16 20 22 26	M22759/44-16-6 M22759/44-20-2 M22759/44-22-5	45-1610 45-1610 45-1610	I.R. ETFE	SINGLE CONDUCTOR, SILVER COATED COPPER, HOOKUP WIRE	MIL-W-22759
637	22CH 26AL	234-96565		TEFLON ASBES- TOS	CHOMEL AND ALUMEL, THERMO- COUPLE TWISTED, SHIELDED AND JACKETED	MIL-W-5846
638		M17/172-00001	45-162	TEFLON-FEP	COAXIAL CABLE	MIL-C-17
640	12 16 18 20 22	USE WIRE TYPE 852 M81381/7-16-6 M81381/7-18-9 M81381/7-20-2 M81381/7-22-5	45-1633 45-1633 45-1633 45-1633	6 KAPTON-3 6 KAPTON-3 6 KAPTON-3 6 KAPTON-3	SINGLE CONDUCTOR, SILVER COATED STRANDED COPPER	MIL-W-81381 MIL-W-81381 MIL-W-81381 MIL-W-81381
641	22 24 26	M81381/9-22-59 M81381/9-24-6 M81381/9-26-0	45-1633 45-1633 45-1633	6 KAPTON-3 6 KAPTON-3 6 KAPTON-3	SINGLE CONDUCTOR, SILVER COATED STRANDED HIGH	MIL-W-81381 MIL-W-81381 MIL-W-81381
644	16 20 22	M27500-16MR2U11 M27500-20MR2U11 M27500-22MR2U11	45-1633 45-1633 45-1633	6 KAPTON-3	2 CONDUCTOR, STRANDED COPPER, TWISTED (76301 SPEC ST5M 1247-**-2UN)	MIL-C-27500
645	16 20 22	M27500-16MR3U11 M27500-20MR3U11 M27500-22MR3U11	45-1633 45-1633 45-1633	6 KAPTON-3	3 CONDUCTOR, STRANDED COPPER, TWISTED (76301 SPEC ST5M 1247-**-3UN)	MIL-C-27500
646	16 20 22	M27500-16MR4U11 M27500-20MR4U11 M27500-22MR4U11	45-1633 45-1633 45-1633	6 KAPTON-3	4 CONDUCTOR, STRANDED COPPER, TWISTED (76301 SPEC ST5M 1247-**-4UN)	MIL-C-27500

Table 1. Wire Type List (Continued)

WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION 5	WIRE DESCRIPTION	WIRE SPECIFI- CATION
647	16 20 22	M27500-16MR5U11 M27500-20MR5U11 M27500-22MR5U11	45-1633 45-1633 45-1633	6 KAPTON-3	5 CONDUCTOR, STRANDED COPPER, TWISTED (76301 SPEC ST5M 1247-**-5UN)	MIL-C-27500
650	22 24	M27500-22MT2U11 M27500-24MT2U11	45-1633 45-1633	6 KAPTON-3	2 CONDUCTOR, STRANDED COPPER ALLOY, TWISTED (76301 SPEC ST5M 1247-**-A2UN)	MIL-C-27500
651	22 24	M27500-22MT3U11 M27500-24MT3U11	45-1633 45-1633	6 KAPTON-3	3 CONDUCTOR, STRANDED COPPER ALLOY, TWISTED (76301 SPEC ST5M 1247-**-A3UN)	MIL-C-27500
652	22 24	M27500-22MT4U11 M27500-24MT4U11	45-1633 45-1633	6 KAPTON-3	4 CONDUCTOR, STRANDED COPPER ALLOY, TWISTED (76301 SPEC ST5M 1247-**-A4UN)	MIL-C-27500
653	22 24	M27500-22MT5U11 M27500-24MT5U11	45-1633 45-1633	6 KAPTON-3	5 CONDUCTOR, STRANDED COPPER ALLOY, TWISTED (76301 SPEC ST5M 1247-**-A5UN)	MIL-C-27500
654	22 24	M27500-22MT6U11 M27500-24MT6U11	45-1633 45-1633	6 KAPTON-3	6 CONDUCTOR, STRANDED COPPER ALLOY, TWISTED (76301 SPEC ST5M 1247-**-A6UN)	MIL-C-27500
655	22 24	M27500-22MT7U11 M27500-24MT7U11	45-1633 45-1633	6 KAPTON-3 6 KAPTON-3	7 CONDUCTOR, STRANDED COPPER ALLOY, TWISTED (76301 SPEC ST5M 1247-**-A7UN)	MIL-C-27500

Table 1. Wire Type List (Continued)

WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION 5	WIRE DESCRIPTION	WIRE SPECIFI- CATION
656	16 20 22	M27500-16MR1S11 M27500-20MR1S11 M27500-22MR1S11	45-1633 45-1633 45-1633	6 KAPTON-3 6 KAPTON-3 6 KAPTON-3	SINGLE CONDUCTOR, STRANDED COPPER, TWISTED SILVER- COATED COPPER SHIELD, KAPTON-2 JACKET (76301 SPEC ST5M 1247-**-1SJ)	MIL-C-27500
657	16 20 22	M27500-16MR2S11 M27500-20MR2S11 M27500-22MR2S11	45-1633 45-1633 45-1633	6 KAPTON-3 6 KAPTON-3 6 KAPTON-3	2 CONDUCTOR, STRANDED COPPER, TWISTED SILVER- COATED COPPER SHIELD, KAPTON-2 JACKET (76301 SPEC ST5M1247-**-2SJ)	MIL-C-27500
663	22 24 26	ST5M1247-22A1SJ ST5M1247-24A1SJ ST5M1247-26A1SJ		6 KAPTON-2	1 CONDUCTOR, SIL- VER-COATED COPPER SHIELD, AND JACKETED	MIL-C-27500
664	22 24 26	M27500-22MT2S11 M27500-24MT2S11 M27500-26MT2S11	45-1633 45-1633 45-1633	6 KAPTON-3 6 KAPTON-3 6 KAPTON-3	2 CONDUCTOR, STRANDED COPPER ALLOY, TWISTED (76301 SPEC ST5M1247-**-A2SJ)	MIL-C-27500
665	22 24 26	M27500-22MT3S11 M27500-24MT3S11 M27500-26MT3S11	45-1633 45-1633 45-1633	6 KAPTON-3 6 KAPTON-3 6 KAPTON-3	3 CONDUCTOR, STRANDED COPPER ALLOY, TWISTED (76301 SPEC ST5M1247-**-A3SJ)	MIL-C-27500
670	22	ST5M1212-001		TEFLON-FEP	TWIN CONDUCTOR COAX, 68 OHMS, HOOKUP WIRE	MIL-C-17
677	12 16 20 22	M22759/11-12-4 M22759/11-16-6 M22759/11-20-2 M22759/11-22-5	45-1611 45-1610 45-1610 45-1610	TEFLON-TFE1 TEFLON-TFE1 TEFLON-TFE1	SINGLE CONDUCTOR, STRANDED SILVER COATED COPPER	MIL-W-22759 MIL-W-22759 MIL-W-22759 MIL-W-22759
678	8 10 12 14 16 18 20 22	M22759/7-8-2 M22759/7-10-1 M22759/7-12-4 M22759/7-14-5 M22759/7-16-6 M22759/7-18-9 M22759/7-20-2 M22759/7-22-5	45-130 45-1500 45-1500 45-1500 45-1501 45-1501 45-1501	TEFLON-TFE2 TEFLON-TFE2 TEFLON-TFE2 TEFLON-TFE2 TEFLON-TFE2 TEFLON-TFE2 TEFLON-TFE2	SINGLE CONDUCTOR, STRANDED SILVER COATED COPPER	MIL-W-22759 MIL-W-22759 MIL-W-22759 MIL-W-22759 MIL-W-22759 MIL-W-22759 MIL-W-22759 MIL-W-22759

Table 1. Wire Type List (Continued)

WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION 5	WIRE DESCRIPTION	WIRE SPECIFI- CATION
679	12	M22759/8-12-4	45-1500	TEFLON-TFE2	SINGLE CONDUCTOR STRANDED NICKEL COATED COPPER, AIRFRAME WIRE	MIL-W-22759
680	8 10 12 14 16 18 20 22	M22759/12-8-2 M22759/12-10-1 M22759/12-12-4 M22759/12-14-5 M22759/12-16-6 M22759/12-18-9 M22759/12-20-2 M22759/12-25	45-130 45-1611 45-1611 45-1610 45-1610 45-1610 45-1610	TEFLON-TFE1 TEFLON-TFE1 TEFLON-TFE1 TEFLON-TFE1 TEFLON-TFE1 TEFLON-TFE1 TEFLON-TFE1 TEFLON-TFE1	SINGLE CONDUCTOR, STRANDED NICKEL COATED COPPER	MIL-W-22759 MIL-W-22759 MIL-W-22759 MIL-W-22759 MIL-W-22759 MIL-W-22759 MIL-W-22759 MIL-W-22759
681		3 ST5M 1212-002	45-163	TEFLON-FEP	COAXIAL CABLE TWIN CONDUCTOR 68 OHM	MIL-C-17
684	12 14 16 18 20 22	M27500-12-SA3U00 M27500-14-SA3U00 M27500-16-SA3U00 M27500-18-SA3U00 M27500-20-SA3U00 M27500-22-SA3U00	45-1501 45-1501 45-1500 45-1500 45-1500	TEFLON-TFE-2 TEFLON-TFE-2 TEFLON-TFE-2 TEFLON-TFE-2 TEFLON-TFE-2	3 CONDUCTOR, STRANDED SILVER COATED COPPER, TWISTED (76301 SPEC ST5M 1298-**-S3U0)	MIL-C-27500
686	12	ST5M1298-12T3UO		TEFLON-TFE2	3 CONDUCTORS, STRANDED NICKEL COATED COPPER, TWISTED, AIRFRAME WIRE	MIL-C-27500
689		M17/175-00001	45-163 OR 45-165		COAXIAL CABLE 50 OHM	MIL-C-17
701	12 14 16 18 20 22	ST5M1298-12T4UO ST5M1298-14T4UO ST5M1298-16T4UO ST5M1298-18T4UO ST5M1298-20T4UO ST5M1298-22T4UO	45-1501 45-1501 45-1500 45-1500 45-1500	6 TEFLON-TFE2	4 CONDUCTOR, STRANDED SILVER COATED COPPER, TEFLON-TFE2 TWISTED, AIRFRAME WIRE	MIL-C-27500
703	12	M27500-12SA2S06	45-1501	TEFLON-TFE2	2 CONDUCTOR STRANDED SILVER COATED COPPER, SIL- VER-COATED COPPER SHIELD, TEFLON-TFE1 JACKET (WHITE) (76301 SPEC ST5M 1298-**S2S6) 4 **	MIL-C-27500
704		M17/174-00001	45-164		COAXIAL CABLE 50 OHM	MIL-C-17
706		3 ST5M1323-001	7	TEFLON-FEP	TRIAXIAL CABLE 95 OHM	MIL-C-17

Table 1. Wire Type List (Continued)

WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION	WIRE DESCRIPTION	WIRE SPECIFI- CATION
707	22	M81381/13-22-55	45-1654	6 6 KAPTON-3	SINGLE CONDUCTOR, STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, GREEN/GREEN STRIP	MIL-W-81381
715	14 16 18 20 22	M27500-14SA1S06 M27500-16SA1S06 M27500-18SA1S06 M27500-20SA1S06 M27500-22SA1S06	45-1501 45-1500 45-1500 45-1500 45-1500	TEFLON-TFE2 TEFLON-TFE2 TEFLON-TFE2 TEFLON-TFE2 TEFLON-TFE2	SINGLE CONDUCTOR, STRANDED SILVER COATED COPPER SIL- VER-COATED COPPER SHIELD, TEFLON-TFE1 JACKET (WHITE), (76301 SPEC ST5M 1298-**S1S6) 4 **	MIL-C-27500
716		3 24898/6X2	45-163	TEFLON-FEP	COAXIAL CABLE, TWIN COND. (98 OHM)	MIL-C-17
726	8 10 12 14 16 20 22	M27500-8RC3U00 M27500-10RC3U00 M27500-12RC3U00 M27500-14RC3U00 M27500-16RC3U00 M27500-20RC3U00 M27500-22RC3U00	45-130 45-1611 45-1611 45-1610 45-1610 45-1610	TEFLON-TFE1	3 CONDUCTOR, STRANDED SILVER- COATED TWISTED 76301 SPEC ST5M 1298-**R3U0) 4 **	MIL-C-27500
731		3 ST5M1398-001			COAXIAL 50 OHM	MIL-C-17
733	8 10 12 14 16 20 22	M27500-8RC4U00 M27500-10RC4U00 M27500-12RC4U00 M27500-14RC4U00 M27500-16RC4U00 M27500-20RC4U00 M27500-22RC4U00	45-130 45-1611 45-1611 45-1610 45-1610 45-1610	TEFLON-TFE1	4 CONDUCTOR, STRANDED SILVER- COATED COPPER TWISTED (76301 SPEC ST5M 1298-**R4U0)	MIL-C-27500
740	12 14 16 20 22	M27500-12RC4U00 M27500-14RC4U00 M27500-16RC4U00 M27500-20RC4U00 M27500-22RC4U00	45-1611 45-1611 45-1611 45-1610	TEFLON	2 CONDUCTOR, TWISTED (76301 SPEC ST5M 1298-**R2U0)	MIL-C-27500
741	20 22	ST5M1298-20R1S6 ST5M1298-22R1S6	2	TEFLON-TFE1	SINGLE CONDUCTOR, STRANDED SILVER COATED COPPER, TEFLON-TFE 1 INSULATION, SILVER COATED COPPER SHIELD, JACKET, HOOKUP WIRE	MIL-C-27500

Table 1. Wire Type List (Continued)

	WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION 5	WIRE DESCRIPTION	WIRE SPECIFI- CATION
	744		M17/169-001	45-162	TEFLON-FEP	COAX, 50 OHMS	MIL-C-17
_	761	24	M22759/22-24-6	45-1610	TEFLON-TFE1	SINGLE CONDUCTOR, STRANDED SILVER- COATED HIGH STRENGTH COPPER ALLOY	MIL-W-22759
	762	22	M27500-22NA2U00	45-1654	6 6 KAPTON-3	2 CONDUCTOR, STRANDED SILVER- COATED HIGH STRENGTH COPPER ALLOY TWISTED (76301 SPEC ST5M 1247-22B2UN)	MIL-C-27500
	793	12 16 20 22	ST5M129812R2S6 ST5M129816R2S6 ST5M129820R2S6 ST5M129822R2S6		TEFLON-TFE1	2 CONDUCTOR, STRANDED SILVER COATED COPPER, INSULATION, TWISTED, SILVER COATED COPPER SHIELD, JACKET HOOKUP WIRE	MIL-C-27500
	794	22	ST5M129822R3S6		TEFLON-TFE1	3 CONDUCTOR, STRANDED SILVER COATED COPPER, TWISTED, SILVER COATED COPPER SHIELD, JACKET HOOKUP WIRE	MIL-C-27500
-	798	16 20 22 24	M27500-16MR1G11 M27500-20MR1G11 M27500-22MR1G11 M27500-24MR1G11	2 2 2 2	FLUOROCARBON POLYIMIDE	SINGLE CONDUCTOR, SHIELDED (76301 SPEC ST5M 1247F**-1SJ)	MIL-C-27500
	799	16 20 22 24	M27500-16MR2G11 M27500-20MR2G11 M27500-22MR2G11 M27500-24MR2G11	2 2 2 2	FLUOROCARBON POLYIMIDE	2 CONDUCTOR, TWISTED, SHIELDED (76301 SPEC ST5M 1247F**-2SJ) 4 **	MIL-C-27500

Table 1. Wire Type List (Continued)

WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION	WIRE DESCRIPTION	WIRE SPECIFI- CATION
800	16 20 22 24	M27500-16MR3G11 M27500-20MR3G11 M27500-22MR3G11 M27500-24MR3G11	2 2 2 2	FLUOROCARBON POLYIMIDE	3 CONDUCTOR, TWISTED SHIELDED (76301 SPEC ST5M 1247F**-3SJ)	MIL-C-27500
802	16 20 22 24	M27500-16MR5G11 M27500-20MR5G11 M27500-22MR5G11 M27500-24MR5G11	2 2 2 2	FLUOROCARBON POLYIMIDE	5 CONDUCTOR, TWISTED SHIELDED (76301 SPEC ST5M 1247F**-5SJ)	MIL-C-27500
803	16 20 22 24	M27500-16MR6G11 M27500-20MR6G11 M27500-22MR6G11 M27500-24MR6G11	2 2 2 2		6 CONDUCTOR, TWISTED SHIELDED (76301 SPEC ST5M 1247F**-6SJ)	MIL-C-27500
805	22 24	M27500-22MT1G11 M27500-24MT1G11	2 2	FLUOROCARBON	SINGLE CONDUCTOR, STRANDED COPPER ALLOY, TWISTED SHIELD (76301 SPEC ST5M 1247F**A1SJ)	MIL-C-27500
806	22 24 26	M27500-22MT2G11 M27500-24MT2G11 M27500-26MT2G11	2 2	FLUOROCARBON POLYIMIDE	2 CONDUCTOR, STRANDED COPPER ALLOY, TWISTED SHIELDED (76301 SPEC ST5M 1247F**A2SJ)	MIL-C-27500
807	22 24	M27500-22MT3G11 M27500-24MT3G11	2 2	FLUOROCARBON POLYIMIDE	3 CONDUCTOR, STRANDED COPPER ALLOY, TWISTED SHIELDED (76301 SPEC ST5M 1247F**A3SJ)	MIL-C-27500
808	22 24	M27500-22MT4G11 M27500-24MT4G11	2 2	FLUOROCARBON POLYIMIDE	4 CONDUCTOR, STRANDED COPPER ALLOY, SHIELD (76301 SPEC ST5M 1247F**A4SJ)	MIL-C-27500
809	22 24	M27500-22MT5G11 M27500-24MT5G11	2 2	FLUOROCARBON POLYIMIDE	5 CONDUCTOR, STRANDED COPPER ALLOY, SHIELD (76301 SPEC ST5M 1247F**A5SJ)	MIL-C-27500

Table 1. Wire Type List (Continued)

WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION 5	WIRE DESCRIPTION	WIRE SPECIFI- CATION
811	22 24	M27500-22MT7G11 M27500-24MT7G11	2 2	FLUOROCARBON POLYIMIDE	7 CONDUCTOR, STRANDED COPPER ALLOY, SHIELD (76301 SPEC ST5M 1247F**A7SJ)	MIL-C-27500
813	8 10 12 16 20 22	M27500-8RC1G06 M27500-10RC1G06 M27500-12RC1G06 M27500-16RC1G06 M27500-20RC1G06 M27500-22RC1G06		TEFLON	SINGLE CONDUCTOR, STRANDED TWISTED SHIELDED (76301 SPEC ST5M 1298F**R1S6)	MIL-C-27500
814	8 10 12 16 20 22	M27500-8RC2G06 M27500-10RC2G06 M27500-12RC2G06 M27500-16RC2G06 M27500-20RC2G06 M27500-22RC2G06		TEFLON	2 CONDUCTOR, STRANDED TWISTED SHIELDED (76301 SPEC ST5M 1298F**R2S6)	MIL-C-27500
818	24	M27500-22TM2G06		TEFLON	2 CONDUCTOR, STRANDED TWISTED COPPER ALLOY SHIELD (76301 SPEC ST5M 1298F**M2S6)	MIL-C-27500
822		M17/139-00001	45-163 OR 45-165	PERFLUORO- ALKOXY	COAXIAL CABLE	MIL-C-17
824	26	3 ST5M1212-003		TEFLON-FEP	COAXIAL CABLE, TWIN CONDUCTOR, 68 OHM	MIL-C-17
847	22	3 ST5M1212-004	1	TEFLON-FEP	COAXIAL CABLE, TWIN CONDUCTOR, 68 OHM	MIL-C-17
852	4 6 8 10 12 16 20	M81381/11-4-47 M81381/11-6-67 M81381/11-8-27 M81381/11-10-17 M81381/11-12-47 M81381/11-16-67 M81381/11 -20-27		FLUOROCARBON POLYIMIDE	SINGLE CONDUCTOR, SILVER COATED COP- PER CONDUCTOR	MIL-W-81381
862	24	5M1897-001 5M1897-003			2 CONDUCTOR, RF CABLE, 125 OHMS	
866		5M1945-001			SINGLE FIBER OPTIC CABLE	DOD-C-85045

Table 1. Wire Type List (Continued)

WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION 5	WIRE DESCRIPTION	WIRE SPECIFI- CATION
867	16 20 22	M25038/2-16-9 M25038/2 -20-9 M25038/2-22-9				MIL-W-25038
869		M5846-1E2/22626A			CHROMEL AND ALUMEL, THERMO- COUPLE, TWISTED, SHIELDED	MIL-W-5846
872	22	5M2022-002		TEFLON-TFE1	2 CONDUCTORS, STRANDED SILVER COATED COPPER TWISTED, SILVER COATED COPPER SHIELD, JACKET (GREEN), 1. CONDUC- TOR GREEN, 2. CON- DUCTOR GREEN/ GREEN/STRIP DOUBLE TAPE WRAPPED JACKET, HOOKUP WIRE	MIL-C-17
875	26 24	M27500-26M2UO M27500-24M2UO	45-1633	6 KAPTON-2	2 CONDUCTOR, TWISTED, UNSHLD UNJACKED	MIL-C-27500
880		5M2142-001	45-165	TEFLON-FEP	TRIAXIAL CABLE, 75 OHMS,	MIL-C-17
884	22	5M2230-001			TRIAXIAL CABLE 75 OHMS	
931	16 20 22	5M2619-16-1SJ 5M2619-20-1SJ 5M2619-22-1SJ	45-1610 45-1610 45-1610	TEFLON-TFE5	SINGLE CONDUCTOR, STRANDED SILVER COATED COPPER, SILVER COATED COPPER SHIELD, FLAT BRAIDED, DOUBLE TAPE WRAPPED JACKET, HOOKUP WIRE	MIL-C-27500
932	16 20 22	5M2619-16-2SJ 5M2619-20-2SJ 5M2619-22-2SJ	45-1610 45-1610 45-1610	TEFLON-TFE5	2 CONDUCTOR, STRANDED SILVER COATED COPPER, SILVER COATED COPPER SHIELD, FLAT BRAID, DOUBLE TAPE WRAPPED JACKET, HOOKUP WIRE	MIL-C-27500

Table 1. Wire Type List (Continued)

WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION 5	WIRE DESCRIPTION	WIRE SPECIFI- CATION
933	16 22	5M2619-16-3SJ 5M2619-22-3SJ	45-1610 45-1610 45-1610	TEFLON-TFE5	3 CONDUCTOR, STRANDED SILVER COATED COPPER, TWISTED, SILVER COATED COPPER SHIELD, FLAT BRAID, DOUBLE TAPE WRAPPED JACKET, HOOKUP WIRE	MIL-C-27500
934	22	5M2619-22-4SJ	45-1610	TEFLON-TFE5	4 COND, SPC, TW, SHLD, J, GAUGE COLOR CODED HOKUP	MIL-C-27500
935	16 20 22	5M2619-16-5SJ 5M2619-20-5SJ 5M2619-22-5SJ	45-1610 45-1610 45-1610	TEFLON-TFE5	5 CONDUCTOR STRANDED SILVER COATED COPPER, TWISTED, SILVER COATED COPPER SHIELD, FLAT BRAID, DOUBLE TAPE WRAPPED JACKET, HOOKUP WIRE	MIL-C-27500
936	22	5M2619-22-6SJ	45-1610	TEFLON-TFE5	6 CONDUCTOR STRANDED SILVER COATED COPPER, TWISTED, SILVER COATED COPPER SHIELD, FLAT BRAID, DOUBLE TAPE WRAPPED JACKET, HOOKUP WIRE	MIL-C-27500
938	16 20 22	5M2619-16-2UN 5M2619-20-2UN 5M2619-22-2UN	45-1610 45-1610 45-1610	NONE	2 CONDUCTOR, STRANDED SILVER COATED COPPER, TWISTED, HOOKUP WIRE	MIL-C-27500
939	16 20 22	5M2619-16-3UN 5M2619-20-3UN 5M2619-22-3UN	45-1610 45-1610 45-1610	NONE	3 CONDUCTOR, STRANDED SILVER COATED COPPER, TWISTED, HOOKUP WIRE	MIL-C-27500

Table 1. Wire Type List (Continued)

WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION 5	WIRE DESCRIPTION	WIRE SPECIFI- CATION
940	16 20 22	5M2619-16-4UN 5M2619-20-4UN 5M2619-22-4UN	45-1610 45-1610 45-1610	NONE	4 CONDUCTOR STRANDED SILVER COATED COPPER, TWISTED, HOOKUP WIRE	MIL-C-27500
941	16 22	5M2619-16-5UN 5M2619-22-5UN	45-1610	NONE	5 CONDUCTOR STRANDED SILVER COATED COPPER, TWISTED, HOOKUP WIRE	MIL-C-27500
942	16 20 22	5M2619-16-6UN 5M2619-20-6UN 5M2619-22-6UN	45-1610 45-1610 45-1610	NONE	6 CONDUCTOR STRANDED SILVER COATED COPPER, ALLOY, TWISTED, HOOKUP WIRE	MIL-C-27500
944	22 26	5M2619-22A1SJ 5M2619-26A1SJ	45-1610 45-1610	TEFLON-TFE5	SINGLE CONDUCTOR, STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, SILVER COATED COPPER SHIELD, FLAT BRAID, DOUBLE TAPE WRAPPED JACKET, HOOKUP WIRE	MIL-C-27500
945	22 26	5M2619-22A2SJ 5M2619-26A2SJ	45-1610 45-1610	TEFLON-TFE5	2 CONDUCTOR STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, SILVER COATED TWISTED, COPPER SHIELD, FLAT BRAID, DOUBLE TAPE WRAPPED JACKET, HOOKUP WIRE	MIL-C-27500

Table 1. Wire Type List (Continued)

WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION 5	WIRE DESCRIPTION	WIRE SPECIFI- CATION
946	22 26	5M2619-22A3SJ 5M2619-26A3SJ	45-1610 45-1610	TEFLON-TFE5	3 CONDUCTOR STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, SILVER COATED TWISTED, COPPER SHIELD, FLAT BRAID, DOUBLE TAPE WRAPPED JACKET, HOOKUP WIRE	MIL-C-27500
947	26	5M2619-26A4SJ	45-1610	TEFLON-TFE5	4 CONDUCTOR STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, SILVER COATED TWISTED, COPPER SHIELD, FLAT BRAID, DOUBLE TAPE WRAPPED JACKET, HOOKUP WIRE	MIL-C-27500
948	26	5M2619-26A5SJ	45-1610	TEFLON-TFE5	5 CONDUCTOR STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, SILVER COATED TWISTED, COPPER SHIELD, FLAT BRAID, DOUBLE TAPE WRAPPED JACKET, HOOKUP WIRE	MIL-C-27500
949	26	5M2619-26A6SJ	45-1610	TEFLON-TFE5	6 CONDUCTOR STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, SILVER COATED TWISTED, COPPER SHIELD, FLAT BRAID, DOUBLE TAPE WRAPPED JACKET, HOOKUP WIRE	MIL-C-27500 1

Table 1. Wire Type List (Continued)

WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION 5	WIRE DESCRIPTION	WIRE SPECIFI- CATION
950	26	5M2619-26A7SJ	45-1610 45-1610	TEFLON-TFE5.	7 CONDUCTOR STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, SILVER COATED TWISTED, COPPER SHIELD, FLAT BRAID, DOUBLE TAPE WRAPPED JACKET, HOOKUP WIRE	MIL-C-27500
951	22 26	5M2619-22A2UN SM2619-26A2UN	45-1610 45-1610	NONE	2 CONDUCTOR STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, TWISTED, HOOKUP WIRE	MIL-C-27500
952	22 26	5M2619-22A3UN 5M2619-26A3UN	45-1610 45-1610	NONE	3 CONDUCTOR STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, TWISTED, HOOKUP WIRE	MIL-C-27500
953	26	5M2619-26A4UN	45-1610	NONE	4 CONDUCTOR STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, TWISTED, HOOKUP WIRE	MIL-C-27500
954	26	5M2619-26A5UN	45-1610	NONE	5 CONDUCTOR STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, TWISTED, HOOKUP WIRE	MIL-C-27500
957	22	5M2619-22B2UN	45-1610	NONE	2 CONDUCTOR STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, TWISTED, AIRFRAME WIRE	MIL-C-27500

Dielectric with 45-163 stripper.

Table 1. Wire Type List (Continued)

WIRE TYPE	WIRE GAGE	PART NUMBER	WIRE STRIP.	INSULATION 5	WIRE DESCRIPTION	WIRE SPECIFI- CATION
958	22	5M2619-22B3UN	45-1610	NONE	3 CONDUCTOR STRANDED SILVER COATED HIGH STRENGTH COPPER ALLOY, TWISTED, AIRFRAME WIRE	MIL-C-27500
961	20	5M2619-20F1SJ	45-1610	TFE5	SINGLE CONDUCTOR, STRANDED SILVER COATED COPPER, I.R.ETFE INSULATED, SILVER COATED COPPER SHIELD, FLAT BRAID, DOUBLE TAPE WRAPPED JACKET, AIRFRAME WIRE	MIL-C-27500
962	20	5M2619-20F2SJ	45-1610	TFE5	2 CONDUCTOR STRANDED SILVER COATED COPPER, I.R.ETFE INSULATED, TWISTED, SILVER COATED COPPER SHIELD, FLAT BRAID, DOUBLE TAPE WRAPPED JACKET, AIRFRAME WIRE	MIL-C-27500
963	16	5M2619-16F3UN	45-1610	NONE	3 CONDUCTOR, STRANDED SILVER COATED COPPER, TWISTED, AIRFRAME WIRE	MIL-C-27500
998					SEE DRAWING NOTE ON CABLE ASSEMBLY	
	Use stripp	er 45-130 for outer cov	er, then pus	h shielding back and us	e 45-177 stripper for inner wir	es.
		ination of 45-162 and 4 at 45-163 stripper.	5-163 stripp	per for outer cover remo	oval, then push shielding back	and strip inner
3	Cable mar	nufactured per McDonn	ell specifica	tion, CAGE code: 0597	73; 12517; 92607	
4 ;	** Are to	be replaced by gauge no	umber of wi	re being used.		
		tion description by type				
	D 1 IZ	apton/Teflon insulated	oc oroc	a mafamamaad in tablaa 2	and 1	

A1-F18AC-WRM-000

Change 2

Table 2. Insulation Definition

INSULATION TYPE	DESCRIPTION
TEFLON - TFE1	POLYTETRA FLUOROETHYLENE (EXTRUDED)
TEFLON - TFE2	POLYTETRA FLUOROETHYLENE (EXTRUDED) REINFORCED WITH ABRASION RESISTANT MINERAL FILLERS
TEFLON - TFE3	POLYTETRA FLUOROETHYLENE (EXTRUDED) WITH ASBESTOS
TEFLON - TFE4	TETRAFLUOROETHYLENE RESIN COATED GLASS BRAID
TEFLON - TFE5 TEFLON - FEP	POLYTETRA FLUOROETHYLENE TAPE (WRAPPED AND FUSED) FLUORINATED ETHYLENE PROPYLENE (EXTRUDED)
TEFLON - FFEP	FLUORINATED ETHYLENE PROPYLENE (EXTRODED)
KAPTON - 1	POLYIMIDE TAPE
KAPTON - 2	FLUOROCARBON/POLYIMIDE TAPE
KAPTON - 3	FLUOROCARBON/POLYIMIDE TAPE, MODIFIED AROMATIC POLYIMIDE RESIN COATING
I.R. ETFE	IRRADIATED, ETHYLENE - TETRAFLUOROETHYENE COPOLYMER

Table 3. Cross Reference List Of Kapton Insulated To Crosslinked - Tefzel (XLETFE) Insulated Wire/Cable

KAPTON WIRE/CABLE			EQUIVALENT CROSSLINKED-TEFZEL (XLETFE) WIRE/CABLE		
WIRE TYPE	PART NUMBER	DESCRIPTION	WIRE TYPE	PART NUMBER	DESCRIPTION

WARNING

Avoid insulation temperatures above 230°C (446°F). Toxic hydrogen fluoride may be produced which is corrosive to eyes, skin, and respiratory tract. Provide local exhaust ventilation if heating is necessary. Waste should be landfilled to comply with federal, state, and local regulations. Refer to the appropriate Material Safety Data Sheet for further information.

NOTE

Whenever Wire Repair Manual or Aircraft drawings specify kapton insulated wire/cable, substitute wire type shown in Table 3 for repair or replacement.

M81381/7-16-6	16 GA	588-16	M22759/44-16-6	16 GA
M81381/7-20-2	20 GA	588-20	M22759/44-20-2	20 GA
M81381/7-22-5	22 GA	588-22	M22759/44-22-5	22 GA
M81381/9-22-59	22 GA	584-22	M22759/35-22-55	22 GA
M81381/9-26-0	26 GA	583-26	M22759/33-26-0	26 GA
ST5M1247-16-2UN	2 COND, TW	938-16	5M2619-16-2UN	2 COND, TW
ST5M1247-20-2UN	2 COND, TW	938-20	5M2619-20-2UN	2 COND, TW
ST5M1247-22-2UN	2 COND, TW	938-22	5M2619-22-2UN	2 COND, TW
ST5M1247-16-3UN	3 COND, TW	939-16	5M2619-16-3UN	3 COND, TW
	M81381/7-20-2 M81381/7-22-5 M81381/9-22-59 M81381/9-26-0 ST5M1247-16-2UN ST5M1247-20-2UN ST5M1247-22-2UN	M81381/7-20-2 20 GA M81381/7-22-5 22 GA M81381/9-22-59 22 GA M81381/9-26-0 26 GA ST5M1247-16-2UN 2 COND, TW ST5M1247-20-2UN 2 COND, TW ST5M1247-22-2UN 2 COND, TW	M81381/7-20-2 20 GA 588-20 M81381/7-22-5 22 GA 588-22 M81381/9-22-59 22 GA 584-22 M81381/9-26-0 26 GA 583-26 ST5M1247-16-2UN 2 COND, TW 938-16 ST5M1247-20-2UN 2 COND, TW 938-20 ST5M1247-22-2UN 2 COND, TW 938-22	M81381/7-20-2 20 GA 588-20 M22759/44-20-2 M81381/7-22-5 22 GA 588-22 M22759/44-22-5 M81381/9-22-59 22 GA 584-22 M22759/35-22-55 M81381/9-26-0 26 GA 583-26 M22759/33-26-0 ST5M1247-16-2UN 2 COND, TW 938-16 5M2619-16-2UN ST5M1247-20-2UN 2 COND, TW 938-20 5M2619-20-2UN ST5M1247-22-2UN 2 COND, TW 938-22 5M2619-22-2UN

Change 2

Table 3. Cross Reference List Of Kapton Insulated To Crosslinked - Tefzel (XLETFE) Insulated Wire/Cable (Continued)

KAPTON WIRE/CABLE				EQUIVALENT CROSSLINKED-TEFZEL (XLETFE) WIRE/CABLE			
WIRE TYPE	PART NUMBER	DESCRIPTION	WIRE TYPE	PART NUMBER	DESCRIPTION		
645-20	ST5M1247-20-3UN	3 COND, TW	939-20	5M2619-20-3UN	3 COND, TW		
645-22	ST5M1247-22-3UN	3 COND, TW	939-22	5M2619-22-3UN	3 COND, TW		
646-16	ST5M1247-16-4UN	4 COND, TW	940-16	5M2619-16-4UN	4 COND, TW		
646-20	ST5M1247-20-4UN	4 COND, TW	940-20	5M2619-20-4UN	4 COND, TW		
646-22	ST5M1247-22-4UN	4 COND, TW	940-22	5M2619-22-4UN	4 COND, TW		
647-16	ST5M1247-16-5UN	5 COND, TW	941-16	5M2619-16-5UN	5 COND, TW		
650-22	ST5M1247-22A2UN	2 COND, TW	951-22	5M2619-22A2UN	2 COND, TW		
650-26	ST5M1247-26A2UN	2 COND, TW	951-26	5M2619-26A2UN	2 COND, TW		
651-22	ST5M1427-22A3UN	3 COND, TW	952-22	5M2619-22A3UN	3 COND, TW		
651-26	ST5M1247-26A3UN	3 COND, TW	952-26	5M2619-26A3UN	3 COND, TW		
652-26	ST5M1247-26A4UN	4 COND, TW	953-26	5M2619-26A4UN	4 COND, TW		
653-26	ST5M1247-26A5UN	5 COND, TW	954-26	5M2619-26A5UN	5 COND, TW		
656-22	ST5M1247-22-1SJ	1 COND, SH	931-22	5M2619-22-1SJ	1 COND, SH		
657-22	ST5M1247-22-2SJ	2 COND, TW SH	932-22	5M2619-22-2SJ	2 COND, TW SH		
663-22	ST5M1247-22A1SJ	1 COND, SH	944-22	5M2619-22A1SJ	1 COND, SH		
707-22	M81381/13-22-55	22 GA	584-22	M22759/35-22-55	22 GA		
762-22	ST5M1247-22B2UN	2 COND, TW	957-22	5M2619-22B2UN	2 COND, TW		
763-22	ST5M1247-22B3UN	3 COND, TW	958-22	5M2619-22B3UN	3 COND, TW		
798-16	ST5M1247F16-1SJ	1 COND, SH	931-16	5M2619-16-1SJ	1 COND, SH		
798-20	ST5M1247F20-1SJ	1 COND, SH	931-20	5M2619-20-1SJ	1 COND, SH		
798-22	ST5M1247F22-1SJ	1 COND, SH	931-22	5M2619-22-1SJ	1 COND, SH		
799-16	ST5M1247F16-2SJ	2 COND, TW SH	932-16	5M2619-16-2SJ	2 COND, TW SH		
799-20	ST5M1247F20-2SJ	2 COND, TW SH	932-20	5M2619-20-2SJ	2 COND, TW SH		
799-22	ST5M1247F22-2SJ	2 COND, TW SH	932-22	5M2619-22-2SJ	2 COND, TW SH		
800-16	ST5M1247F16-3SJ	3 COND, TW SH	933-16	5M2619-16-3SJ	3 COND, TW SH		
800-22	ST5M1247F22-3SJ	3 COND, TW SH	933-22	5M2619-22-3SJ	3 COND, TW SH		
802-22	ST5M1247F22-5SJ	5 COND, TW SH	935-22	5M2619-22-5SJ	5 COND, TW SH		
803-22	ST5M1247F22-6SJ	6 COND, TW SH	936-22	5M2619-22-6SJ	6 COND, TW SH		
805-22	ST5M1247F22A1SJ	1 COND, SH	944-22	5M2619-22A1SJ	1 COND, SH		
805-26	ST5M1247F26A1SJ	1 COND, SH	944-26	5M2619-26A1SJ	1 COND, SH		
806-22	ST5M1247F22A2SJ	2 COND, TW SH	945-22	5M2619-22A2SJ	2 COND, TW SH		
806-26	ST5M1247F26A2SJ	2 COND, TW SH	945-26	5M2619-26A2SJ	2 COND, TW SH		
807-22	ST5M1247F22A3SJ	3 COND, TW SH	946-22	5M2619-22A3SJ	3 COND, TW SH		
807-26	ST5M1247F26A3SJ	3 COND, TW SH	946-26	5M2619-26A3SJ	3 COND, TW SH		
808-26	ST5M1247F26A4SJ	4 COND, TW SH	947-26	5M2619-26A4SJ	4 COND, TW SH		
809-26	ST5M1247F26A5SJ	5 COND, TW SH	948-26	5M2619-26A5SJ	5 COND, TW SH		
810-26	ST5M1247F26A6SJ	6 COND, TW SH	949-26	5M2619-26A6SJ	6 COND, TW SH		
811-26	ST5M1247F26A7SJ	6 COND, TW SH	950-26	5M2619-26A7SJ	7 COND, TW SH		
852-12	M81381/11-12-47	12 GA	587-12	ST5M1298-T3U0	12 GA		
852-16	M81381/11-16-67	16 GA	587-16	M22759/43-16-67	16 GA		
852-20	M81381/11-20-27	20 GA	587-20	M22759/43-20-27	20 GA		

2 COND, TW SH

2 COND, TW SH

2 COND, TW

Change 2

818-22

818-26

875-26

ST5M1298F22M2S6

ST5M1298F26M2S6

ST5M1298-26M2UO

Table 4. Cross Reference List Of Teflon Insulated To Crosslinked - Tefzel (XLETFE)
Insulated Wire/Cable

insulated wire/Cable								
TEFLON WIRE/CABLE				EQUIVALENT CROSSLINKED-TEFZEL (XLETFE) WIRE/CABLE				
WIRE TYPE	PART NUMBER	DESCRIPTION	WIRE TYPE	PART NUMBER	DESCRIPTION			
		WARN	IING					
	Avoid insulation temperatures above 230°C (446°F). Toxic hydrogen fluoride may be produced which is corrosive to eyes, skin, and respiratory tract. Provide local exhaust ventilation if heating is necessary. Waste should be landfilled to comply with federal, state, and local regulations. Refer to the appropriate Material Safety Data Sheet for further information.							
677-12	M22759/11-12-4	12 GA	587-12	M22759/43-12-47	12 GA			
677-16	M22759/11-12-4 M22759/11-16-6	12 GA 16 GA	588-16	M22759/44-16-6	16 GA			
677-20	M22759/11-10-0 M22759/11-20-2	20 GA	588-20	M22759/44-20-2	20 GA			
677-22	M22759/11-22-5	22 GA	588-22	M22759/44-22-5	22 GA			
678-12	M22759/7-12-4	12 GA	587-12	M22759/43-12-47	12 GA			
678-16	M22759/7-16-6	16 GA	587-16	M22759/43-16-67	16 GA			
678-20	M22759/7-20-2	20 GA	587-20	M22759/43-20-27	20 GA			
678-22	M22759/7-22-5	22 GA	584-22	M22759/35-22-55	22 GA			
683-12	ST5M1298-12S2UO	2 COND, TW	587-12	M22759/43-12-47	12 GA			
684-16	ST5M1298-16S3UO	3 COND, TW	963-16	5M2619-16F3UN	3 COND, TW			
703-20	ST5M1298-20S2S6	2 COND, SH	962-20	5M2619-20F2SJ	2 COND, SH			
715-20	ST5M1298-20S1S6	1 COND, SH	961-20	5M2619-20F1SJ	1 COND, SH			
726-16	ST5M1298-16R3UO	3 COND, TW	939-16	5M2619-16-3UN	3 COND, TW			
726-20	ST5M1298-20R3UO	3 COND, TW	939-20	5M2619-20-3UN	3 COND, TW			
726-22	ST5M1298-22R3UO	3 COND, TW	939-22	5M2619-22-3UN	3 COND, TW			
733-20	ST5M1298-20R4UO	4 COND, TW	940-20	5M2619-20-4UN	4 COND, TW			
733-22	ST5M1298-22R4UO	4 COND, TW	940-22	5M2619-22-4UN	4 COND, TW			
740-16	ST5M1298-16R2UO	2 COND, TW	938-16	5M2619-16-2UN	2 COND, TW			
740-20	ST5M1298-20R2UO	2 COND, TW	938-20	5M2619-20-2UN	2 COND, TW			
740-22	ST5M1298-22R2UO	2 COND, TW	938-22	5M2619-22-2UN	2 COND, TW			
741-20	ST5M1298-20R1S6	1 COND, SH	931-20	5M2619-20-1SJ	1 COND, SH			
741-22	ST5M1298-22R1S6	1 COND, SH	931-22	5M2619-22-1SJ	1 COND, SH			
761-26	M22759/22-26-0	26 GA	583-26	M22759/33-26-0	26 GA			
793-22	ST5M1298-22R2S6	2 COND, TW SH	932-22	5M2619-22-2SJ	2 COND, TW SH			
794-22	ST5M1298-22R3S6	3 COND, TW SH	933-22	5M2619-22-3SJ	3 COND, TW SH			
814-22	ST5M1298F22R2S6	2 COND, TW SH	932-22	5M2619-22-2SJ	3 COND, TW SH			
010.00	GETTA 41000 F003 400 6	A GOVED TRANSPORT	0.45.00	53.50.610.00 A OGT	A GOND WILL GIL			

945-22

945-26

951-26

5M2619-22A2SJ

5M2619-26A2SJ

5M2619-26A2UN

2 COND, TW SH

2 COND, TW SH

2 COND, TW

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA STRIPPING TOOLS

Reference Material

None

Alphabetical Index

Subject	Page No
Basic Wire Stripper Use	6
Basic Wire Stripper, Figure 2	2
Coaxial Cable Stripper Adjustment and Use	4
Depth Adjustment	4
Distance Adjustment	4
Use	5
Coaxial Cable Stripper, Figure 1	2
Completing Jacket Separation, Figure 13	8
Description	2
Distance Adjustment, Figure 5	4
General Stripping Instructions	3
Jacket Cut Adjustment, Figure 6	4
Materials Required	3
Operation, Figure 8	5
Placing Wire in Slot of Stripping Tool, Figure 9	6
Removing Insulation, Figure 10	6
Rotating R-720 REON Stripper, Figure 12	7
R-720 REON Stripper Use	7
R-720 REON Stripper, Figure 3	3
Shield Cut Adjustment, Figure 7	5
Stripping Completed, Figure 11	7
Stripping Tool Versus Wire Type, Table 1	9
Support Equipment Required	3
Unacceptable Conditions, Figure 4	3

Record of Applicable Technical Directives

None

1. **DESCRIPTION.**

- 2. Before wire can be assembled to connectors, terminals, splices, etc., the insulation must be stripped from connecting ends to expose the bare conductor. To accomplish this task, hand stripper tools are used to remove the insulation. This work package contains a basic description on how to use the tool and a table of the strippers used to strip certain wire types.
- 3. There are three basic styles of strippers:
 - a. Coaxial cable stripper. See figure 1.

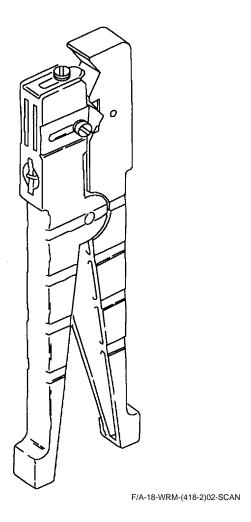


Figure 1. Coaxial Cable Stripper

b. Basic wire strippers. See figure 2.

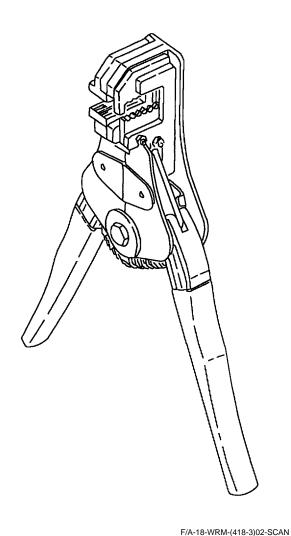
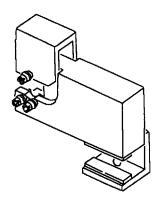


Figure 2. Basic Wire Stripper

c. The R-720 REON stripper. See figure 3.



F/A-18-WRM-(423-2)02-SCAN

Figure 3. R-720 Reon Stripper

4. Basic wire strippers have an assortment of cutting blades which fit the different sizes of wire. The coaxial stripper has two types of blades; a standard flat edge blade and a rounded blade used as an accessory for slitting cables. The REON stripper has a set of standard blades.

Support Equipment Required

Part Number or Type Designation

Nomenclature

See Table 1

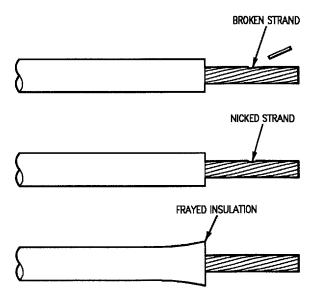
Wire Stripper(s)

Materials Required

None

5. GENERAL STRIPPING INSTRUCTIONS.

- 6. Observe the following precautions when using wire strippers.
- a. Make sure all stripping blades are sharp and free from nicks, dents, etc.
- b. When using any type of wire stripper, hold wire perpendicular to cutting blades.
- c. Make sure insulation is clean-cut with no frayed or ragged edges. Trim if necessary.
- d. Make sure all insulation is removed from stripped area. Some types of wires are supplied with a transparent layer between conductor and primary insulation. If this is found, remove it.
- e. When it is necessary to remove lengths of insulation longer than 3/4-inch, it is easier to do it in two or more operations.
- f. Retwist copper strands by hand to restore natural lay and tightness of strands.
 - g. Conditions shown in figure 4 are unacceptable.



F/A-18-WRM-(404-1)01-CATI

Figure 4. Unacceptable Conditions

7. COAXIAL CABLE STRIPPER ADJUSTMENT AND USE.

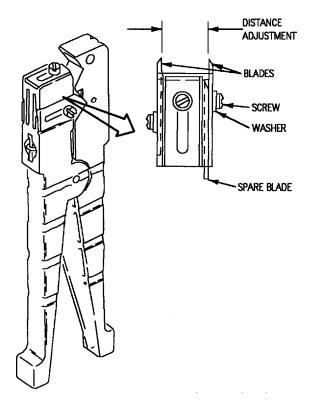
8. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 5.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting two spare blades will change distance between blades 3/64-inch.

- c. Install screws and tighten handtight.
- d. Adjust depth of cut.



F/A-18-WRM-(409-2)01-SCAN

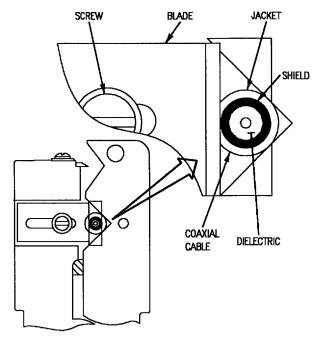
Figure 5. Distance Adjustment

9. **DEPTH ADJUSTMENT.**

NOTE

A test strip should be done on spare coax before stripping coax to be used.

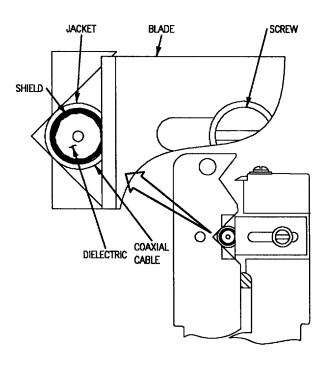
- a. Position coaxial cable in stripper until the end butts against the blade. See figure 6.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.



F/A-18-WRM-(409-3)01-CATI

Figure 6. Jacket Cut Adjustment

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 7.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 9a through 9d until blades cut through jacket and shield without damaging shield and dielectric.



F/A-18-WRM-(409-4)01-CATI

Figure 7. Shield Cut Adjustment

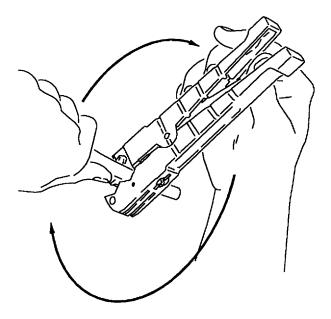
10. **USE.**

a. Position stripper on cable so that blades face down. See figure 8.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.

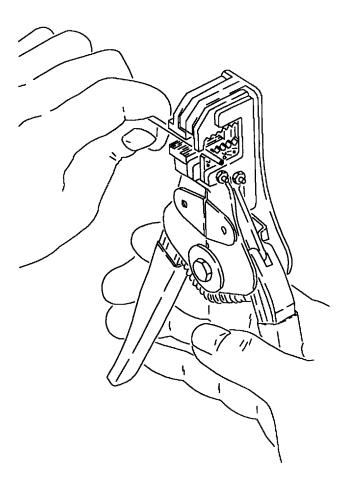


F/A-18-WRM-(409-1)01-SCAN

Figure 8. Operation

11. BASIC WIRE STRIPPER USE.

a. Insert wire into exact center of correct cutting slot for wire size to be stripped (each slot is marked with wire size). See figure 9.



F/A-18-WRM-(401-1)01-SCAN

Figure 9. Placing Wire in Slot of Stripping Tool

b. Close handles together as far as they will go. See figure 10.

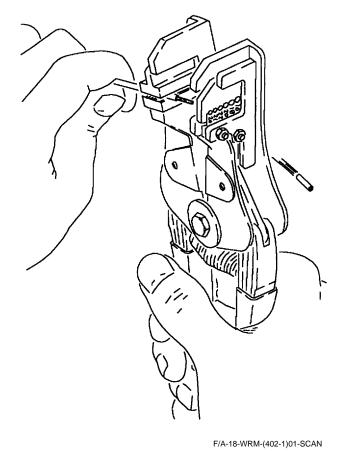
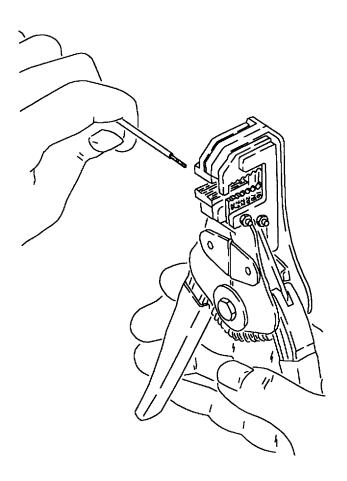


Figure 10. Removing Insulation

c. Remove wire while releasing handles, allowing wire holder to return to open position. See figure 11.



F/A-18-WRM-(403-1)01-SCAN

Figure 11. Stripping Completed

12. R-720 REON STRIPPER USE.

- a. Place R-720 stripping tool on wire at desired
- b. Rotate tool one-half turn (180 $^{\circ}$). See figure 12.

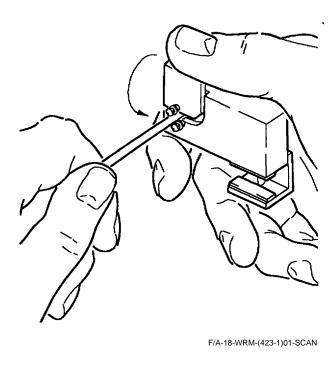


Figure 12. Rotating R-720 Reon Stripper

c. Flex wire to complete jacket separation. See figure 13.

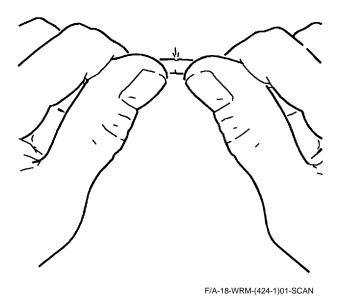


Figure 13. Completing Jacket Separation

Table 1. Stripping Tool Versus Wire Type

STRIPPING TOOL	WIRE TYPE	PART NUMBER	WIRE DESCRIPTION
R-720	798 799 800 801 805 806 807 808 809 810		Cable Jacket Only
45-130	678 (8 Gage)	M22759/7-8-2	Single Conductor, Stranded Silver Coated Copper
	726 (8 Gage)	M27500-8RC3U00	3 Conductor, Stranded Silver Coated Twisted
	726 (8 Gage)	M27500-8RC4U00	4 Conductor, Stranded Silver Coated Twisted
	813		Cable Jacket Only
	814		Cable Jacket Only
	824		Cable Jacket Only
45-1500	678 (10 Gage) (12 Gage) (14 Gage)	M22759/7-10-1 M22759/7-12-4 M22759/7-14-5	Single Conductor, Stranded Silver Coated Copper
45-1501	678 (16 Gage) (20 Gage) (18 Gage) (22 Gage)	M22759/7-16-6 M22759/7-18-9 M22759/7-20-2 M22759/7-22-5	Single Conductor, Stranded Silver Coated Copper
45-1610	677 (12 Gage) (16 Gage) (20 Gage) (22 Gage)	M22759/11-12-4 M22759/11-16-6 M22759/11-20-2 M22759/11-22-5	Single Conductor, Stranded Silver Coated Copper
	726 (16 Gage) (18 Gage) (20 Gage) (22 Gage)	M27500-16RC3U00 M27500-18RC3U00 M27500-20RC3U00 M27500-22RC3U00	3 Conductor, Stranded Silver Coated Twisted
	761 (24 Gage)	M22759/22-24-6	Single Conductor, Stranded Silver Coated High Strength Copper Alloy

Table 1. Stripping Tool Versus Wire Type (Continued)

STRIPPING TOOL	WIRE TYPE	PART NUMBER	WIRE DESCRIPTION
45-1611	726 (10 Gage) (12 Gage) (14 Gage)	M27500-10RC4U00 M27500-12RC4U00 M27500-14RC4U00	3 Conductor, Stranded Silver Coated Twisted
45-163	716	AA2270	Coaxial Cable, Twin Cond. (98 OHM)
45-163 OR 45-165	689	RG-400/U	Coaxial Cable (50 OHM)
	822	AA4056	Coaxial Cable
45-164	339	M17/174-00001	Coaxial Cable
45-165	706	AA2325 26895-15X1	Triaxial Cable (95 OHM)
45-1633	640 (16 Gage) (18 Gage) (20 Gage) (22 Gage)	M81381/7-16-6 M81381/7-18-9 M81381/7-20-2 M81381/7-22-5	Single Conductor, Stranded Silver Coated Copper
	641 (22 Gage) (24 Gage) (26 Gage)	M81381/9-22-59 M81381/9-24-6 M81381/9-26-0	Single Conductor, Stranded Silver Coated High
	644 (16 Gage) (18 Gage) (20 Gage) (22 Gage)	M27500-16MR2U11 M27500-18MR2U11 M27500-20MR2U11 M27500-22MR2U11	2 Conductor, Stranded Copper, Twisted
	645 (16 Gage) (18 Gage) (20 Gage) (22 Gage)	M27500-16MR3U11 M27500-18MR3U11 M27500-20MR3U11 M27500-22MR3U11	3 Conductor, Stranded Copper, Twisted
	646 (16 Gage) (18 Gage) (20 Gage) (22 Gage)	M27500-16MR4U11 M27500-18MR4U11 M27500-20MR4U11 M27500-22MR4U11	4 Conductor, Standard Copper, Twisted
	647 (16 Gage) (20 Gage) (22 Gage)	M27500-16MR5U11 M27500-20MR5U11 M27500-22MR5U11	5 Conductor, Stranded Copper, Twisted
	650 (22 Gage) (24 Gage)	M27500-22A2UN M27500-24A2UN	2 Conductor, Stranded Copper Alloy, Twisted

Table 1. Stripping Tool Versus Wire Type (Continued)

STRIPPING TOOL	WIRE TYPE	PART NUMBER	WIRE DESCRIPTION
45-1633 (Cont.)	651 (22 Gage)	M27500-22MT2U11	3 Conductor, Stranded Copper
	(24 Gage)	M27500-24MT2U11	Alloy, Twisted
	652 (22 Gage)	M27500-22MT4U11	4 Conductor, Stranded Copper
	(24 Gage)	M27500-24MT4U11	Alloy, Twisted
	653 (22 Gage)	M27500-22MT5U11	5 Conductor, Stranded Copper
	(24 Gage)	M27500-24MT5U11	Alloy, Twisted
	654 (22 Gage)	M27500-22MT6U11	6 Conductor, Stranded Copper
	(24 Gage)	M27500-24MT6U11	Alloy, Twisted
	655 (22 Gage)	M27500-22MT7U11	7 Conductor, Stranded Copper
	(24 Gage)	M27500-24MT7U11	Alloy, Twisted
	656 (16 Gage)	M27500-16MR2511	Single Conductor, Stranded Copper,
	(20 Gage)	M27500-20MR2511	Twisted Silver Coated Copper Shield,
	(22 Gage)	M27500-22MR2511	Kapton-2 Jacket
	657 (16 Gage)	M27500-16MR2511	2 Conductor, Stranded Copper,
	(20 Gage)	M27500-20MR2511	Twisted Silver Coated Copper Shield,
	(22 Gage)	M27500-22MR2511	Kapton-2 Jacket
	798 (16 Gage) (20 Gage) (22 Gage) (24 Gage)	M27500-16MR1G11 M27500-20MR1G11 M27500-22MR1G11 M27500-24MR1G11	Single Conductor, Shielded
	799 (16 Gage) (20 Gage) (22 Gage) (24 Gage)	M27500-16MR2G11 M27500-20MR2G11 M27500-22MR2G11 M27500-24MR2G11	2 Conductor, Twisted, Shielded
	800 (16 Gage) (20 Gage) (22 Gage) (24 Gage)	M27500-16MR3G11 M27500-20MR3G11 M27500-22MR3G11 M27500-24MR3G11	3 Conductor, Twisted, Shielded
	802 (16 Gage) (20 Gage) (22 Gage)	M27500-16MR5G11 M27500-20MR5G11 M27500-22MR5G11	5 Conductor, Twisted, Shielded
	803 (16 Gage) (20 Gage) (22 Gage) (24 Gage)	M27500-16MR6G11 M27500-20MR6G11 M27500-22MR6G11 M27500-24MR6G11	6 Conductor, Twisted Shielded
	805 (22 Gage)	M27500-22MT1G11	Single Conductor, Stranded Copper
	(24 Gage)	M27500-24MT1G11	Alloy, Shielded

Table 1. Stripping Tool Versus Wire Type (Continued)

STRIPPING TOOL	WIRE TYPE	PART NUMBER	WIRE DESCRIPTION
45-1633 (Cont)	806 (22 Gage)	M27500-22MT2G11	2 Conductor, Stranded Copper
	(24 Gage)	M27500-24MT2G11	Alloy, Twisted Shielded
	807 (22 Gage)	M27500-22MT3G11	3 Conductor, Stranded Copper
	(24 Gage)	M27500-24MT3G11	Alloy, Twisted Shielded
	808 (22 Gage)	M27500-22MT4G11	4 Conductor, Stranded Copper
	(24 Gage)	M27500-24MT4G11	Alloy, Shielded
	809 (22 Gage)	M27500-22MT5G11	5 Conductor, Stranded Copper
	(24 Gage)	M27500-24MT5G11	Alloy, Shielded
	811 (22 Gage)	M27500-22MT7G11	7 Conductor, Stranded Copper
	(24 Gage)	M27500-24MT7G11	Alloy, Shielded
45-1654	707 (22 Gage)	M81381/13-22-55	Single Conductor, Stranded Silver- Coated High Strength Copper Alloy, Green/Green Strip
45-177	813 (8 Gage) (10 Gage) (12 Gage) (16 Gage) (20 Gage) (22 Gage)	M27500-8RC1G06 M27500-10RC1G06 M27500-12RC1G06 M27500-16RC1G06 M27500-20RC1G06 M27500-22RC1G06	Single Conductor, Shielded, Jacketed
	814 (8 Gage) (10 Gage) (12 Gage) (16 Gage) (20 Gage) (22 Gage)	M27500-8RC2G06 M27500-10RC2G06 M27500-12RC2G06 M27500-16RC2G06 M27500-20RC2G06 M27500-22RC2G06	2 Conductor, Stranded Silver Coated Copper, Twisted, Shielded
	824 (24 Gage)	ST5M1212-003	2 Conductor, Silver Plated Copper Alloy, Twisted, Shielded

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA SOLDERING TOOLS - PROCEDURES

Reference Material

None

Alphabetical Index

Subject	Page No.
Description	1
Filling Solder Cup, Figure 3	3
Materials Required	2
Soldering Electrical Wire in Connector Solder Cup, Figure 4	3
Soldering Procedure Using W60-3 Soldering Iron	2
Soldering Electrical Wire in Connector Solder Cup	2
Tinning Electrical Wires	2
Support Equipment Required	2
Tinning Electrical Wire, Figure 1	2
Unacceptable Conditions After Soldering, Figure 5	3
Unacceptable Conditions After Tinning, Figure 2	2

Record of Applicable Technical Directives

None

1. **DESCRIPTION.**

2. Solder connections are used in aircraft electrical wiring to form a permanent bond between relays, electrical connectors, etc. to electrical wire. For a good solder joint, all surfaces to be soldered must be clean. For maximum heat transfer from soldering iron to sur-

face to be soldered, tip of soldering iron must be clean, smooth, and tinned with a thin coat of solder. Excessive solder will splash on nearby components. Use a damp, lint free cloth to remove excess solder from soldering iron tip.

Support Equipment Required

Part Number or
Type Designation Nomenclature

3308AS100 Repair Set - Wire and

Connector

Materials Required

Specification
or Part Number

Nomenclature

SN60WRMAP2-0-040

MMS409

H-B-643,TYPE 2,
CLASS 1

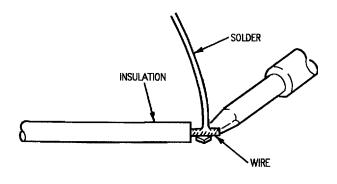
CCC-C-440 TYPE 1,
CLASS 1

Cheesecloth,
Commercial

3. SOLDER PROCEDURE USING W60-3 SOLDERING IRON.

4. TINNING ELECTRICAL WIRES.

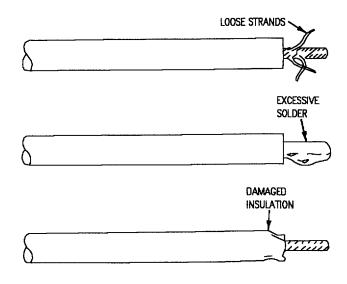
- a. Clean and tin soldering iron tip.
- b. Make sure individual strands have not been disturbed during wire stripping process.
- c. Apply heat and solder to wire at the same time. Remove heat immediately when solder flows into the strands of wire. Apply only enough solder to join wires together. Make sure individual strands of wire are coated with solder and normal lay of individual strands are visible. See figure 1.



F/A-18-WRM-(413-1)01 SCAN

Figure 1. Tinning Electrical Wire

- d. The conditions shown in figure 2 are unacceptable.
 - (1) Loose strands.
 - (2) Excessive solder.
 - (3) Damaged insulation.



F/A-18-WRM-(412-2)02 CATI

Figure 2. Unacceptable Conditions
After Tinning

5. SOLDERING ELECTRICAL WIRE IN CONNECTOR SOLDER CAP.

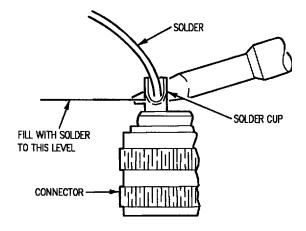
a. Clean and tin soldering iron tip.

WARNING

Cleaning Compound is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection required. Avoid repeated/prolonged contact. Use only in well ventilated areas. Keep away from open flames or other sources of ignition.

- b. Clean solder cup, using cleaning compound and acid brush. Wipe away excess compound with cheese-cloth.
 - c. Place solder in solder cup.
- d. Place soldering iron tip on back side of solder cup and heat solder cup enough to melt

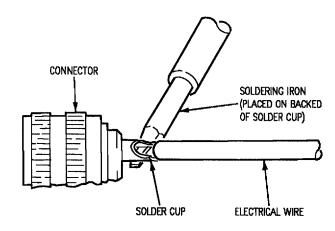
solder and fill solder cup. Do not allow solder cup to overfill and flow outside solder cup. See figure 3.



F/A-18-WRM-(414-1)01-SCAN

Figure 3. Filling Solder Cup

- e. Place tinned wire in solder cup and apply heat to back of solder cup until solder in solder cup starts to flow.
- f Gently push wire into solder cup until it reaches bottom.
- g. Withdraw heat immediately and hold wire in position until solder hardens. See figure 4.



F/A-18-WRM-(415-1)01-SCAN

Figure 4. Soldering Electric Wire in Connector Solder Cup

WARNING

Cleaning Compound is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection required. Avoid repeated/prolonged contact. Use only in well ventilated areas. Keep away from open flames or other sources of ignition.

- h. Clean excess rosin and residue from solder cup using an acid brush and cleaning compound. Wipe away excess cleaning compound with clean cheese-cloth.
- i. Inspect solder joint. Acceptable solder joint is smooth, shiny, free of cracks, and wire strand contour is visible. The conditions shown in figure 5 are unacceptable.
 - (1) Chalky, dull appearance (cold solder
 - (2) Damaged insulation.
 - (3) Too much solder.

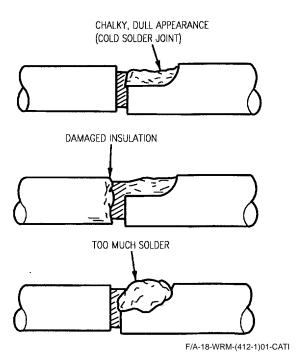


Figure 5. Unacceptable Conditions
After Soldering Contact

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA CRIMPING TOOLS

Reference Material

None

Alphabetical Index

Subject	Page No.
Contact Crimping	5
Contact Crimping, Figure 4	6
Crimp Positioning, Figure 8	8
Crimp Positioning - Insulated Terminal, Figure 16	13
Crimping Terminal - Insulated, Figure 17	14
Crimping Terminal - Non-Insulated, Figure 22	16
Crimp Tool Handle GMT232 Assembly and Use, Figure 12	11
Crimp Tool Handle GMT232 General Description	10
Crimp Tool Handle GMT232 Use	11
Crimp Tool Handle M22520/1-01 Assembly and Adjustments	3
Adjusting Turret Head Before Crimping	4
Removal and Installation of Turret Head	3
Setting Selector Knob Using Turret Head	4
Crimp Tool Handle M22520/1-01 General Description	2
Crimp Tool Handle M22520/2-01 Assembly and Adjustments	4
Removal and Installation of Positioner	4
Setting Selector Knob	5
Crimp Tool Handle M22520/2-01 General Description	4
Crimp Tool Handle M22520/5-01 Assembly and Use	8
Crimping Procedure	8
Die Installation	8
Die Removal	9
Crimp Tool Handle M22520/5-01 General Description	7
Crimp Tool H20 Assembly and Use	2
Crimp Tool Arrangement for Insulated Terminals	12
Crimp Tool Arrangement for Non-Insulated Terminals	14
Crimping Procedure - Insulated Terminals	13
Crimping Procedure - Non-Insulated Terminals	15
Die Turret Removal - Insulated	14
Die Turret Removal - Non-Insulated	17
Crimp Tool H20 General Description	12

Alphabetical Index (Continued)

Subject	Page No
Description	2
Die Installation, Figure 7	8
Die Turret Adjustment, Figure 14	12
Die Types, Figure 6	7
Female Die Adjustment, Figure 19	15
GMT232 Crimp Tool, Figure 11	10
H20 Crimp Tool, Figure 13	12
Indentor Positioning, Figure 18	14
Inspection of Crimp Contact, Figure 5	7
Insulated Terminal Wire Installation, Figure 15	13
Lower Die Removal, Figure 10	9
Materials Required	2
M22520/1-01 Crimp Tool Handle and Turret Head, Figure 1	3
M22520/2-01 Crimp Tool Handle and Positioner, Figure 2	4
Non-Insulated Crimp Positioning, Figure 21	16
Non-Insulated Terminal Wire Installation, Figure 20	15
Strip Gap Check, Figure 3	5
Support Equipment Required	2
Upper Die Remoyal, Figure 9	9

Record of Applicable Technical Directives

None

1. **DESCRIPTION.**

- a. The crimp tools described crimp contacts, end caps, splices, or terminal lugs. These tools crimp the barrel to the conductor, and some simultaneously form the insulation support to the wire insulation.
- b. There are five types of crimp tools described in this work package. They are M22520/1-01, M22520/2-01, M22520/5-01, GMT232 and H20 crimp tools.

Support Equipment Required

Part number Type Designation	Nomenclature
3308AS100	Repair Set-Wire and

Materials Required

None

2. CRIMP TOOL HANDLE M22520/1-01 GENERAL DESCRIPTION.

a. This tool crimps contacts with wire barrel sizes 12 through 20 and selects the correct depth of crimp depending on the contact/wire combination being used. The tool is cycle controlled and will not release until the crimping cycle has been completed. The contact is crimped by the closure of four indentors. Applicable turret or universal positioner heads are installed depending on the application.

3. CRIMP TOOL HANDLE M22520/1-01 ASSEMBLY AND ADJUSTMENTS.

NOTE

Make sure crimp tool is operating correctly by using M22520/3-1 inspection gage.

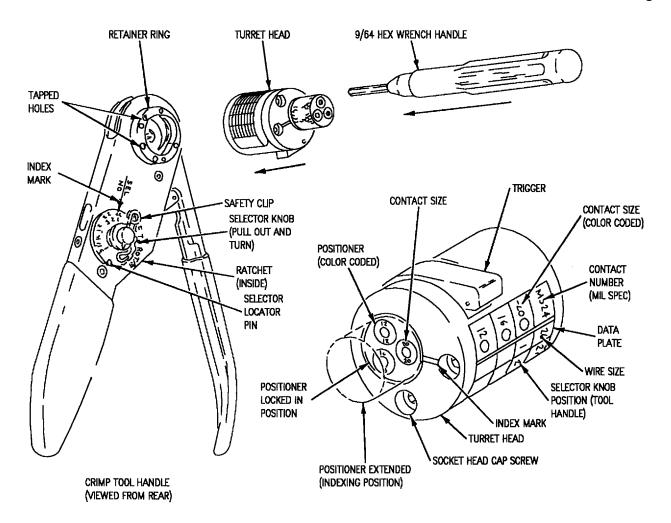
a. Select turret head or universal position head needed for applicable connector.

NOTE

Tool handle shall be fully open when inserting turret or positioner head and when changing selector positions.

4. REMOVAL AND INSTALLATION OF TURRET HEAD.

- a. Press trigger on turret head releasing positioner to extended (indexing) position. See figure 1.
- b. Seat turret head onto retainer ring on back of tool with screws lined up with tapped holes.
- c. Tighten socket head screws with a 9/64-inch allen wrench.
- d. To remove, loosen socket head screw until threads are disengaged from tapped holes, open handles completely and lift off crimp tool



F/A-18-WRM-(405-1)01-SCAN

Figure 1. M22520/1-01 Crimp Tool Handle and Turret Head

5. ADJUSTING TURRET HEAD BEFORE CRIMPING.

- a. Press trigger on turret head releasing positioner to extended (indexing) position.
- b. Select positioner desired from color coded data plate on side of turret head assembly.
- c. Rotate positioners until color coded positioner is lined up with index mark.
- d. Press positioner into turret head until it snaps into locked position.

6. SETTING SELECTOR KNOB USING TURRET HEAD.

- a. Refer to data plate on turret head assembly. The correct selector number is listed below the wire size and opposite the contact size.
 - b. Remove the safety clip lock from selector knob.
- c. Raise selector knob and rotate to selector number found on data plate.
 - d. Replace safety clip.

7. CRIMP TOOL HANDLE M22520/2-01 GENERAL DESCRIPTION.

a. This tool crimps contacts with wire barrel sizes 20 through 28, and selects the correct depth of crimp depending on the contact/wire combination being used. The tool is cycle controlled and will not release until the crimping cycle has been completed. The contact is crimped by the closure of the four indentors. Applicable positioners are installed depending on the application

8. CRIMP TOOL HANDLE M22520/2-01 ASSEMBLY AND ADJUSTMENTS.

NOTE

Make sure crimp tool is operating correctly by using M22520/3-1 inspection gage.

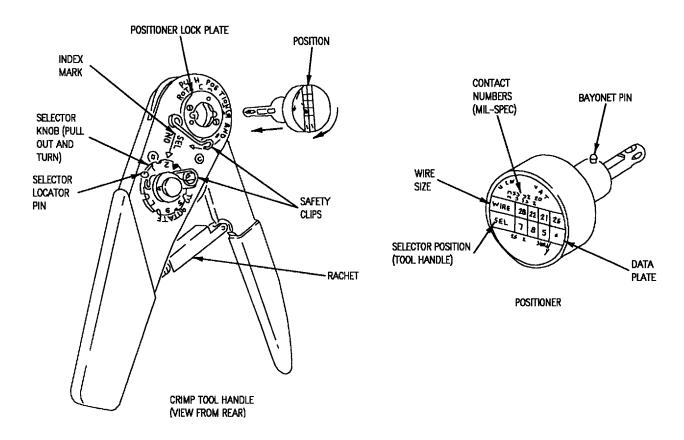
a. Select positioner needed for applicable connector.

NOTE

Tool handle shall be fully open when inserting positioner and when changing selector positions.

9. REMOVAL AND INSTALLATION OF POSITIONER.

- a. Align bayonet pins on positioner with keyway on positioner lock plate. See figure 2.
- b. Push positioner into lock plate until it bottoms, maintain pressure and turn clockwise until it stops. Insert safety clip.
- c. To remove, pull safety clip out. Turn positioner counterclockwise until it stops and lift straight up out of lock plate.



F/A-18-WRM-(405-2)01-SCAN

Figure 2. M22520/2-01 Crimp Tool Handle and Positioner

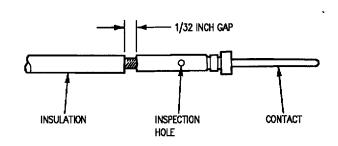
10. SETTING SELECTOR KNOB.

- a. Locate wire size on data plate of positioner and note corresponding selector number.
- b. Remove safety clip. Lift selector knob and rotate until selector number found on data plate aligns with index.
 - c. Install safety clip.

11. CONTACT CRIMPING.

- a. Select correct contact for affected connector.
- b. Insert stripped wire into contact and make sure wire strands are visible in contact inspection hole.

c. Inspect gap dimension between contact and insulation, if applicable. See figure 3.



F/A-18-WRM-(416-1)01-SCAN

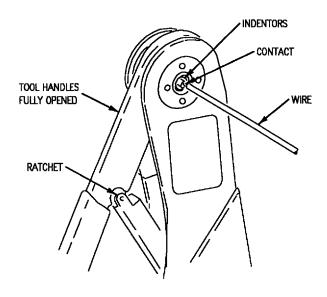
Figure 3. Strip Gap Check

d. Insert contact and wire into crimp tool indentors on front of tool until contact bottoms in positioner/turret. See figure 4, detail A.

NOTE

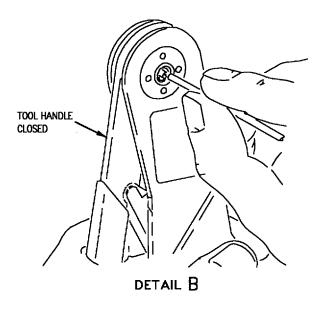
Crimp tool will not release until crimping cycle is completed.

e. Hold wire in place and squeeze tool handles together smoothly until ratchet releases and tool opens. See figure 4, detail B.



CRIMP TOOL HANDLE (VIEWED FROM FRONT)

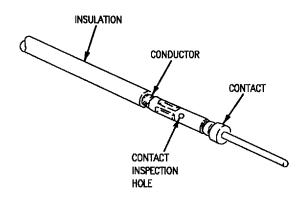
DETAIL A



F/A-18-WRM-(407-1)01-SCAN

Figure 4. Contact Crimping

- f. Remove crimped contact from tool and inspect wire strands in contact inspection hole. See figure 5.
- (1) Two series of four indents shall grip wire and secure contact to wire.
- (2) Wire shall be visible in contact inspection hole, indicating that wire is crimped into contact at correct depth.
 - (3) There shall be no loose or nicked strands.

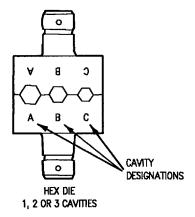


F/A-18-WRM-(W168-1)01-CATI

Figure 5. Inspection of Crimped Contact

12. CRIMP TOOL HANDLE M22520/5-01 GENERAL DESCRIPTION.

a. This tool crimps ferrules on coax, triax and shielded wires. The tool has a self-locking ratchet which prevents opening until crimp is complete. This mechanism must never be disassembled since it insures correct crimping closure. The crimp tool has removable dies. See figure 6.



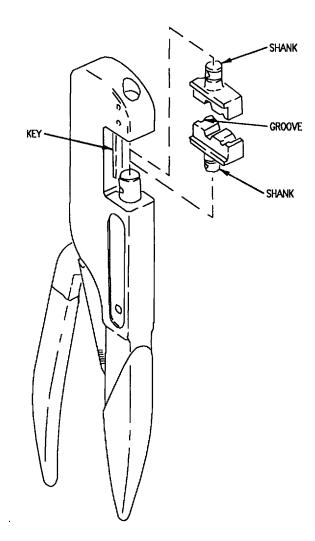
F/A-18-WRM-(417-1)01-SCAN

Figure 6. Die Types

13. CRIMP TOOL HANDLE M22520/5-01 ASSEMBLY AND USE.

14. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole.
- b. Close handle to make sure dies are correctly seated and locked in place. See figure 7.



F/A-18-WRM-(410-2)01-SCAN

Figure 7. Die Installation

15. CRIMPING PROCEDURE.

a. Position ferrule and wire assembly in correct cavities of dies. See figure 8.

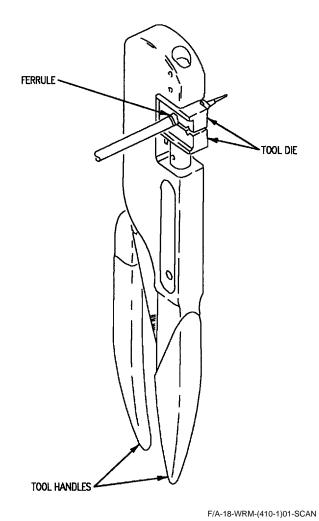


Figure 8. Crimp Positioning

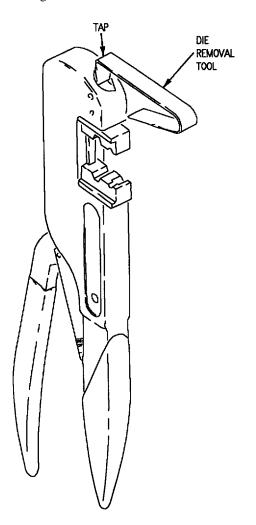
- b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove ferrule and wire assembly and inspect for correct crimp.

16. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inch may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 9.



F/A-18-WRM-(410-3)01-SCAN

Figure 9. Upper Die Removal

- b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.
- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 10.

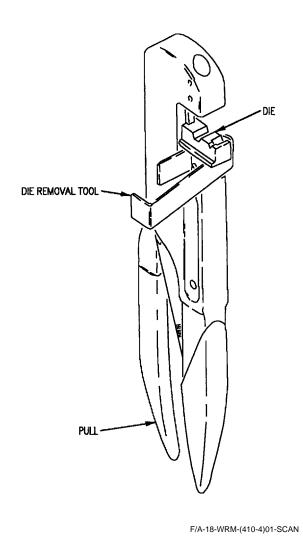
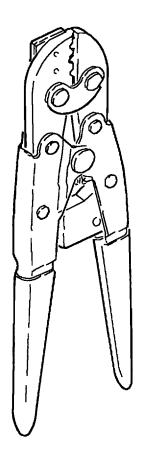


Figure 10. Lower Die Removal

d. Pull handle open with snap action. The die will be released from the lock spring and can then be removed by hand.

17. CRIMP TOOL HANDLE GMT232 GENERAL DESCRIPTION.

a. This tool crimps splice barrels. The tool has three sizes of crimp cavities. There are no removable parts. See figure 11.



F/A-18-WRM-(418-1)01-SCAN

Figure 11. GMT232 Crimp Tool

18. CRIMP TOOL HANDLE GMT232 USE.

- a. Select correct splice barrel needed for application.
- b. Insert stripped wires into splice to be either stub splice or a lap splice.
- c. Center splice in crimping tool and crimp in place.
- d. Make sure wires are secured in splice. See figure 12.

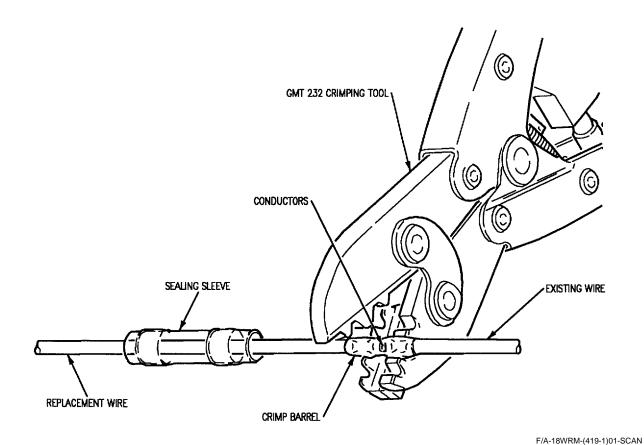


Figure 12. Crimp Tool Handle GMT232 Assembly and Use

19. CRIMP TOOL H20 GENERAL DESCRIPTION.

a. This tool installs insulated or non-insulated terminals. It crimps terminals on 8 through 2 gage wire. See figure 13.

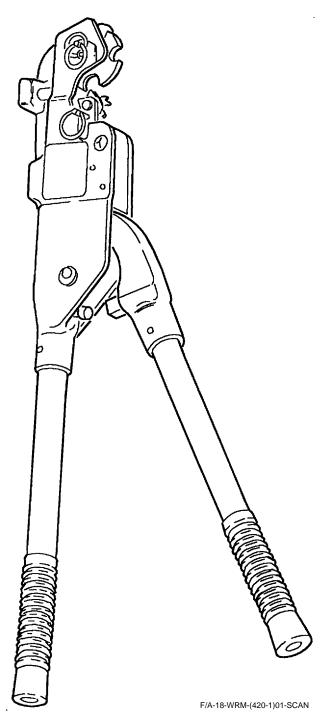


Figure 13. H20 Crimp Tool

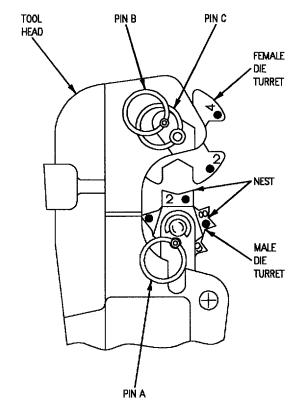
20. CRIMP TOOL H20 ASSEMBLY AND USE.

NOTE

Refer to paragraph 21 for insulated terminals or paragraph 24 for non-insulated terminals.

21. CRIMP TOOL ARRANGEMENT FOR INSULATED TERMINALS.

a. Remove pin A and rotate male die turret until required size nest is in up position. See figure 14.



F/A-18-WRM-00-(32-1)01-CATI

Figure 14. Die Turret Adjustment

- b. Install pin A to lock male die turret in position.
 - c. Remove pins B and C from tool head.



To ease installation of female die turret and prevent damage to the male die turret, make sure crimp tool handle is in the full open position.

- d. Slide female die turret (H20F) into tool head with wire size and color code on same side as the markings on the male die turret.
- e. Install pin C to hold female die turret in position.
- f. Rotate female die turret until wire size and color code match those set in male die turret.
- g. Install pin B through ring of pin C to lock the female die turret in position.

22. CRIMPING PROCEDURE - INSULATED TERMINALS.

a. Insert stripped wire into terminal until wire insulation butts flush inside terminal barrel. See figure 15.

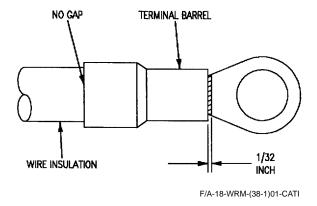
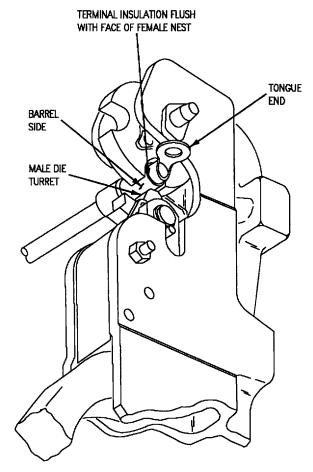


Figure 15. Insulated Terminal Wire Installation

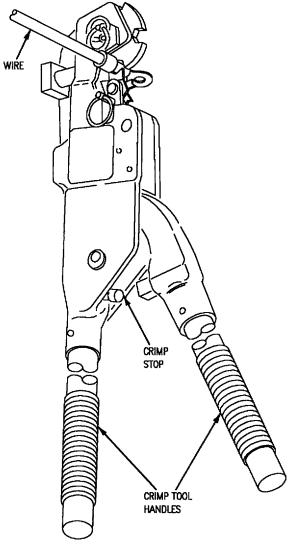
b. Position terminal so that terminal insulation on tongue end is flush with face of female nest and barrel side of terminal faces the male die turret. See figure 16.



F/A-18-WRM-(39-1)01-CATI

Figure 16. Crimp Positioning - Insulated Terminal

c. Squeeze crimp tool handles until handle meets crimp stop. See figure 17.



F/A-18-WRM-(35-1)01-CATI

Figure 17. Crimping Terminal - Insulated

d. Open crimp tool handles and remove terminal and wire assembly and inspect for cracked terminal barrel, crushed wire insulation, crimp in center of terminal barrel, wire not inserted far enough or inserted too far. If crimp is bad, cut the terminal off and begin again.

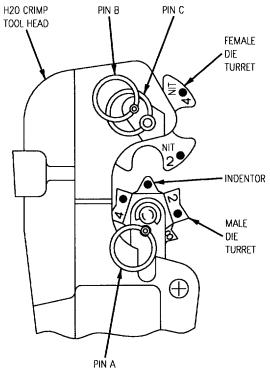
23. DIE TURRET REMOVAL - INSULATED.

a. Remove pins B and C from tool head and remove female die turret. See figure 14.

b. Install pins B and C in tool head.

24. CRIMP TOOL ARRANGEMENT FOR NON-INSULATED TERMINALS.

a. Remove pin A and rotate male die until indentor with white spot is in up position. See Figure 18.



F/A-18-WRM-(36-1)01-CATI

Figure 18. Indentor Positioning

- b. Install pin A to lock male die turret in position.
 - c. Remove pins B and C from tool head.

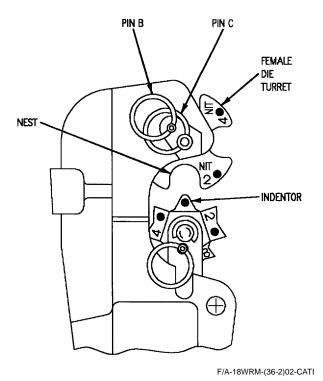


To ease installation of female die turret and prevent damage to the male die turret, make sure crimp tool handle is in the full open position.

- d. Slide female die turret (H20N) into tool head with wire size markings on same side as the markings on the male die turret.
- e. Install pin C to hold female die turret in position.

Page 16

f. Rotate female die turret until required nest size is in line with indentor. See figure 19.



g. Install pin B through ring of pin C to lock the female die turret in position.

Figure 19. Female Die Adjustment

25. CRIMPING PROCEDURE - NON-INSULATED TERMINALS.

a. Insert stripped wire into terminal until wire insulation butts flush against terminal barrel. See figure 20.

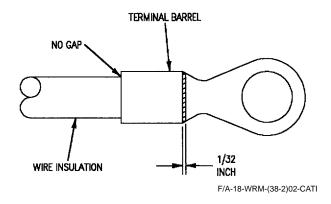
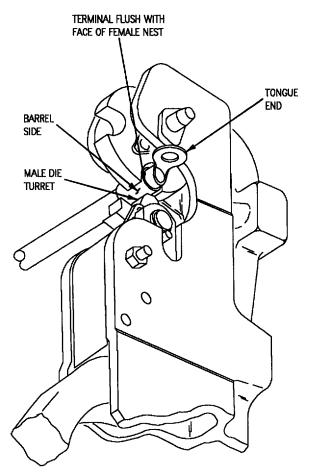


Figure 20. Non-Insulated Terminal Wire Installation

b. Position terminal so that end of terminal barrel at tongue end is flush with face of female nest and barrel side of terminal faces the male die turret. See figure 21.



F/A-18-WRM-(39-2)02-CATI

Figure 21. Non-insulated Crimp Positioning

c. Squeeze crimp tool handles until handle meets crimp stop. See figure 22.

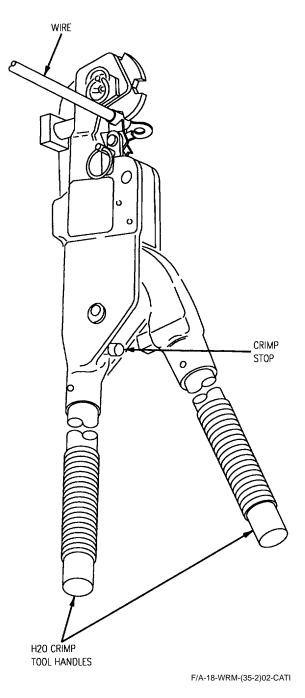


Figure 22. Crimping Terminal - Non-Insulated

d. Open crimp tool handles and remove terminal and wire assembly and inspect for cracked terminal barrel, crushed wire insulation, crimp in center of terminal barrel, wire not inserted far enough or inserted too far. If crimp is bad, cut the terminal off and begin again.

26. DIE TURRET REMOVAL - NON-INSULATED.

- a. Remove pins B and C from tool head and remove female die turret. See figure 19.
 - b. Install pins B and C in tool head.

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR

INSERTION AND REMOVAL TOOL

Reference Material

None

Alphabetical Index

Subject Page I	No.
Description	,
Ejection of Contact, Figure 8)
Ejection of Contact, Figure 14)
Extracting Contact from Connector, Figure 15)
Extracting Contact from Connector, Figure 17	,
Inserting Contact into Connector, Figure 3	
Inserting Contact into Connector, Figure 5	
Inserting Contact into Insertion Tool, Figure 2	
Inserting Contact into Insertion Tool, Figure 4	
Inserting Sealing Plug(s) into Connector, Figure 6	
Inserting Tool into Cup of Contact, Figure 1	,
Insertion of Removal Tool into Connector, Figure 7	,
Materials Required	,
Removal Tool on Wire, Figure 10	
Removing Contact from Connectors, Figure 9	
Removing Contact from Connectors, Figure 12	,
Support Equipment Required	,
Unlocking Contact Mechanism, Figure 11	,
Unlocking Contact Retention Mechanism, Figure 13	1
Unlocking Contact Retention Mechanism with Unwired Contact Removal Tool, Figure 16	
Unwired Contact Removal from Front Release Connector	,
Unwired Contact Removal from Rear Release Connector	
Use of Insertion Tool for Front Release Connectors	,
Use of Insertion Tool for Rear Release Connectors	
Use of Removal Tool for Front Release Connectors	
Use of Removal Tool for Rear Release Connectors	
Wired Contact Removal from Connector	

Record of Applicable Technical Directives

None

1. DESCRIPTION.

a. Connectors which have removable contacts are of two types; front release or rear release. Insertion and removal tools are used to install and remove the contacts. A separate tool is used for each contact size. The tools are made of plastic or metal and have single or double ends. The double ended tools are used for removal and installation, and are color coded according to contact size.

Support Equipment Required

Part Number or Type Designation

Nomenclature

3308AS100

Repair Set-Wire and Connector

Materials Required

Specification or Part Number

Nomenclature

TT-I-735, GRADE B

Isopropyl Alcohol

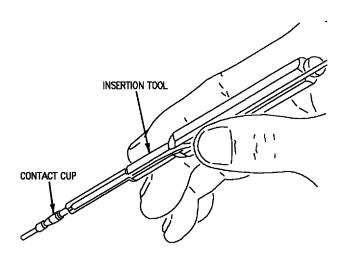
2. USE OF INSERTION TOOL FOR FRONT RELEASE CONNECTORS.

- a. Select correct insertion tool by doing the substeps below:
- (1) Determine correct connector figure number from the Reference Designation to Figure Number Index found in correct connector repair work package.
- (2) Select insertion tool specified in table 1 (Tool Data) of the connector figure number.

WARNING

Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.

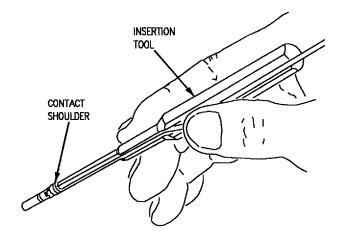
- b. Isopropyl alcohol may be used as a lubricant for insertion of contacts. Apply by brushing on connector insert grommet face or by dipping tool.
- c. Contacts with insulation cups are inserted by sliding cup into front end of insertion tip until end of cup butts against shoulder in insertion tip. See figure 1.



F/A-18-WRM-(723-4)02-SCAN

Figure 1. Inserting Tool into Cup of Contact

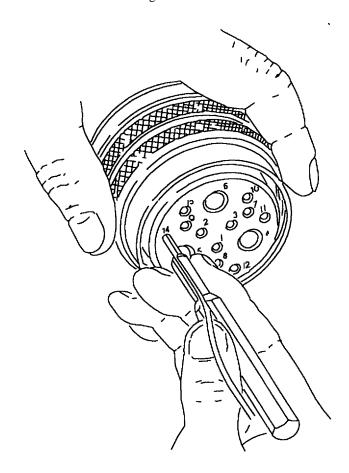
d. Contacts without insulation cups are inserted by sliding wire barrel into front end of insertion tip until contact shoulder butts against insertion tip. See figure 2.



F/A-18-WRM-(721-7)02-SCAN

Figure 2. Inserting Contact into Insertion Tool

e. At right angle to connector insert, align contact with cavity in connector and press contact firmly with insertion tool to seat contact in cavity. Slight click may be heard as retention tines snap into place behind contact shoulder. See figure 3.



F/A-18-WRM-(442-1)02-CATI

Figure 3. Inserting Contact into Connector



Damage may occur to contact insertion tool if tilted or rotated when in connector insert.

f. Remove insertion tool by pulling it straight out of contact cavity and disengage from wire. Carefully pull back on wire to make sure that contact is correctly seated.

3. USE OF INSERTION TOOL FOR REAR RELEASE CONNECTORS.

- a. Select correct insertion tool by doing the substeps below.
- (1) Determine correct connector figure number from the Reference Designation to Figure Number Index found in correct connector repair work package.
- (2) Select insertion tool specified in table 1 (Tool Data) of the connector figure number.

WARNING

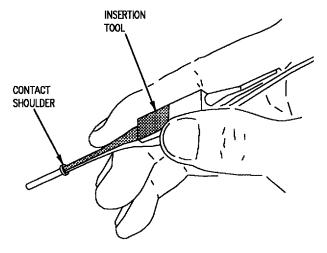
Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.

b. Isopropyl alcohol may be used as a lubricant for insertion of contacts. Apply by brushing on connector insert grommet face or by dipping tool.

c. Place wire and contact assembly into insertion tool and position tool tip over crimp barrel to butt contact shoulder. See figure 4.



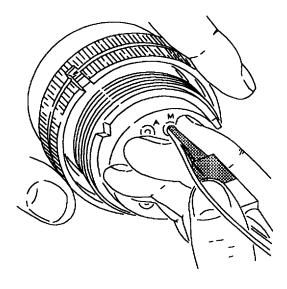
Damage may occur to contact if insertion tool is tilted or rotated when in connector insert.



F/A-18-WRM-(W150-12)01-SCAN

Figure 4. Inserting Contact into Insertion Tool

d. At right angle to connector insert, align contact with cavity in connector and press contact firmly with insertion tool to seat contact in cavity. Slight click may be heard as retention tines snap into place behind contact shoulder. See figure 5.

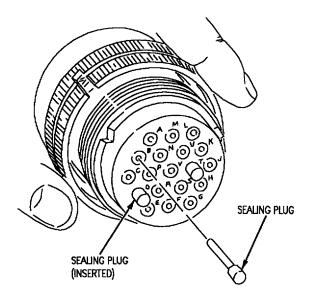


F/A-18-WRM-(443-1)02-SCAN

Figure 5. Inserting Contact into Connector

e. Remove insertion tool by pulling it straight out of contact cavity, disengage from wire. Carefully pull back on wire to make sure that contact is correctly seated.

f. Fill all unused contact cavities with uncrimped contacts, then insert sealing plug, small diameter first, until it bottoms against contact cavity. See figure 6.



F/A-18-WRM-(443-2)02-SCAN

Figure 6. Inserting Sealing Plug(s) into Connector

4. USE OF REMOVAL TOOL FOR FRONT RELEASE CONNECTORS.

5. WIRED CONTACT REMOVAL FROM CONNECTOR.

- a. Select correct removal tool by doing the substeps below:
- (1) Determine correct connector figure number from the Reference Designation to Figure Number Index found in correct connector repair work package.
- (2) Select removal tool specified in table 1 (Tool Data) in the connector figure number.

WARNING

Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.

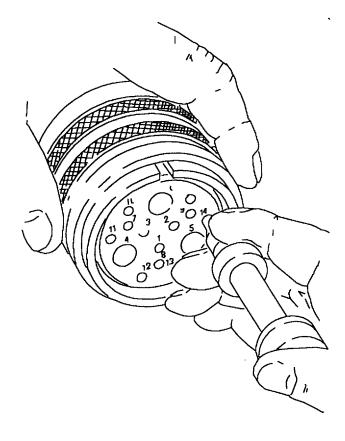
- b. Isopropyl alcohol may be used as a lubricant for removal of contacts. Apply by brushing on connector insert grommet face or by dipping tool.
- c. Working from front (mating end) of connector, slide hollow end of removal tool over contact to be removed. Holding removal tool at a right angle to front insert face, push tool straight toward rear of connector, firmly pressing tool to positive stop when it bottoms in insert cavity. See figure 7.



F/A-18-WRM-442-13)-2-CATI

Figure 7. Insertion of Removal Tool into Connector

d. Maintain pressure on tool handle and push plunger forward until it stops. Contact shall be partially ejected from rear of connector insert. See figure 8.

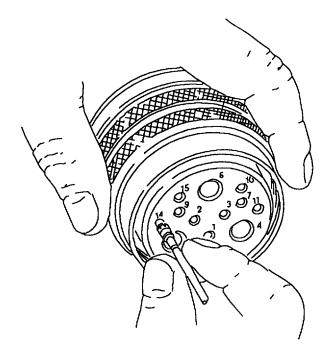


F/A-18-WRM-(442-5)02-CATI

Figure 8. Ejection of Contact

e. Remove tool from contact cavity by pulling straight back to clear connector insert face.

f. Remove contact from rear of connector. See figure 9.



F/A-18-WRM-(442-3)02-CATI

Figure 9. Removing Contact from Connector

6. USE OF REMOVAL TOOL FOR REAR RELEASE CONNECTORS.

- a. Select correct removal tool by doing the substeps below.
- (1) Determine correct connector figure number from the Reference Designation to Figure Number Index found in correct connector repair work package.
- (2) Select removal tool specified in table 1 (Tool Data) in the connector figure number.

WARNING

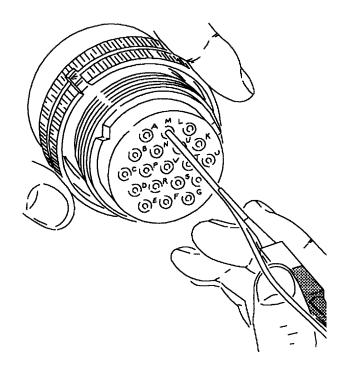
Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.

b. Isopropyl alcohol may be used as a lubricant for removal of contacts. Apply by brushing on connector insert grommet face or by dipping tool.



Do not use tools that have burrs or sharp edges. Burrs or sharp edges can cut through grommet wire sealing webs and destroy the environmental sealing capabilities of a connector.

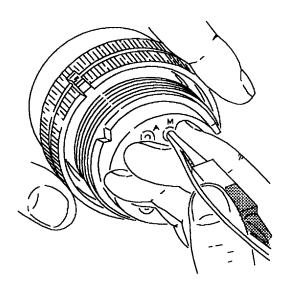
- c. Place wire of contact to be removed into removal tool, with tool tip facing connector insert.
- d. Slide removal tool along wire at right angle to connector insert and align with contact cavity. See figure 10.



F/A-18-WRM-(443-3)02-SCAN

Figure 10. Removal Tool on Wire

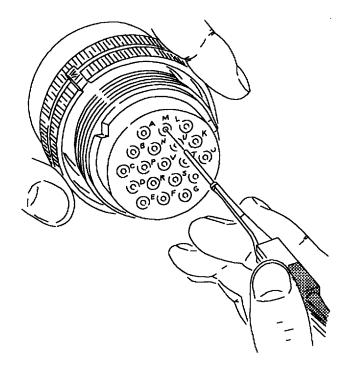
e. Insert tool into contact cavity until tool tip bottoms against contact shoulder. See figure 11.



F/A-18-WRM-(443-4)02-SCAN

Figure 11. Unlocking Contact Mechanism

f. Hold wire and tool and pull straight out from contact cavity. See figure 12.



F/A-18-WRM-(443-5)02-SCAN

Figure 12. Removing Contact from Connector

7. UNWIRED CONTACT REMOVAL FROM FRONT RELEASE CONNECTOR.

- a. Select correct removal tool by doing the substeps below:
- (1) Determine correct connector figure number from the Reference Designation to Figure Number Index found in correct connector repair work package.
- (2) Select removal tool specified in table 1 (Tool Data) in the connector figure number.

WARNING

Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.

b. Isopropyl alcohol may be used as a lubricant for removal of contacts. Apply by brushing on connector insert grommet face or by dipping tool.

CAUTION

Do not use tools that have burrs or sharp edges. Burrs or sharp edges can cut through grommet wire sealing webs and destroy the environmental sealing capabilities of a connector.

c. Working from front of connector, slide hollow end of removal tool over contact to be removed. See figure 13.



F/A-18-WRM-(442-13)02-CATI

Figure 13. Unlocking Contact Retention Mechanism

d. Holding removal tool at a right angle to front insert face, push tool straight toward rear of connector, firmly pressing tool to positive stop when it bottoms in insert cavity. See figure 14.

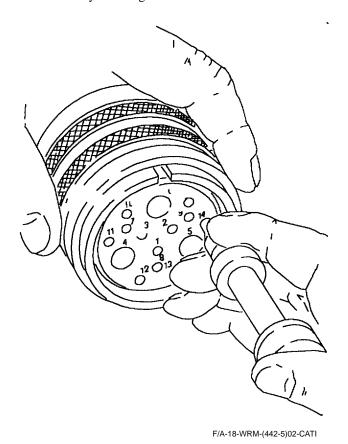
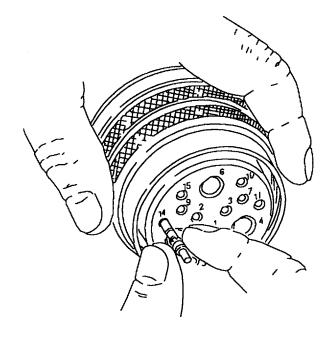


Figure 14. Ejection of Contact

- e. Maintain pressure on tool handle and slide plunger forward until it stops. Contact shall be partly ejected from rear of connector insert.
- f. Remove tool from contact cavity by pulling straight back to clear connector insert face.
- g. Remove contact from rear of connector. See figure 15.



F/A-18-WRM-(442-5)02-CATI

Figure 15. Extracting Contact from Connector

8. UNWIRED CONTACT REMOVAL FROM REAR RELEASE CONNECTOR.

- a. Select correct removal tool by doing the substeps below:
- (1) Determine correct connector figure number from the Reference Designation to Figure Number Index found in correct connector repair work package.
- (2) Select removal tool specified in table 1 (Tool Data) in the connector figure number.

WARNING

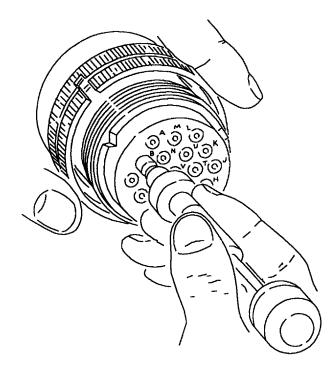
Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.

b. Isopropyl alcohol may be used as a lubricant for removal of contacts. Apply by brushing on connector insert grommet face or by dipping tool.



Do not use tools that have burrs or sharp edges. Burrs or sharp edges can cut through grommet wire sealing webs and destroy the environmental sealing capabilities of a connector.

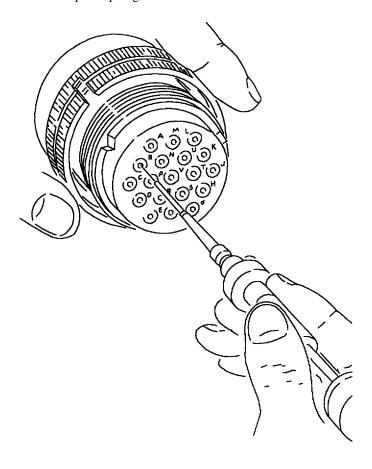
c. Insert unwired removal tool tip into contact cavity until it bottoms in contact cavity and releases contact retention mechanism. See figure 16.



F/A-18-WRM-(443-8)02-SCAN

Figure 16. Unlocking Contact
Retention Mechanism with Unwired
Contact Removal Tool

- d. Grip tool and withdraw unwired removal tool and contact from rear of the connector. See figure 17.
- e. Remove contact by holding unwired removal tool and press plunger forward.



F/A-18-WRM-(443-07)02-SCAN

Figure 17. Extracting Contact from Connector

Change 1 - 1 June1995

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

USE OF THE

TIME DOMAIN REFLECTOMETER (TDR)

This WP supersedes WP 015 00, dated 1 October 1993.

Reference Material

1502 Time Domain Reflectometer Instruction Manual	Tektronix Part No
	070-1792-00 Tek
	tronix TDR Cable
	Tester Application
	Note

Alphabetical Index

Subject	Page No
Adjustment Display, Figure 9	11
Comparison of Tape and Display, Figure 8	11
Crimped Cable, Figure 3	7
Frayed Cable, Figure 5	7
Front Panel Controls, Figure 7	9
General Description of Time Domain Reflectometry (TDR) Measurements	2
Introduction	2
Impedance Nomograph, Figure 1	5
Open Cable, Figure 4	7
Shorted Cable, Figure 2	7
TDR Test Set, Figure 6	8
Time Domain Reflectometry (TDR) Test Set	2
Initial Turn on and Adjustment	3
TDR Testing	3
Use	4

Record of Applicable Technical Directives

None

A1-F18AC-WRM-000 Change 1

1. INTRODUCTION.

2. This work package provides a general description of time domain reflectometry (TDR) measurements, physical and functional descriptions, and setup and operation for the time domain reflectometry test set, Tektronix 1502-4 set. The TDR used with the 74D420048-1001 IMP Adapter Reflect Kit is used to check out the F18 aircraft wiring. Refer to individual system manuals for data related to the wiring.

Support Equipment Required

Part Number or Type Designation

Nomenclature

1502-4 74D420048-1001 TDR Cable Tester IMP Adapter Reflect Kit

Materials Required

None

3. GENERAL DESCRIPTION OF TIME DOMAIN REFLECTOMETRY (TDR) MEASUREMENTS.

- 4. TDR measurements use radar principles to locate and identify transmission line faults by transmitting a pulse into a transmission line or antenna. If there is any deviation in the impedance of the line or antenna, part of the pulse is reflected back to the TDR test set. A reflection from greater than line impedance will cause a positive change on the TDR test set display, and a reflection from less than line impedance will cause a negative change on the display. A TDR slide rule is provided with the test set to convert reflected pulse amplitude to impedance in ohms. An impedance nomograph (figure 1) may be used instead of the TDR slide rule. The CRT is calibrated in millirhos.
- 5. Faults in a transmission line can cause substantial loss of power or distort a transmitted signal. The TDR test set will detect and display significant changes in the characteristic impedance (mismatches, shorts, and opens) of a transmission line. The shape of the reflected pulse is the signature of the fault type. The time it takes the pulse to return is directly proportional to the distance down the transmission line. Figure 2 shows the characteristic downward trace of a transmission line with a shorted termination (zero impedance).

Shorts can be caused by mechanical damage or by moisture seeping through a crack in the dielectric. A crimped transmission line will cause a decrease in impedance at one point in a transmission line as exhibited in figure 3. Crimping can be caused by excessive bending of transmission lines or by equipment shifting against a transmission line. The upward trace of an open transmission line is shown in figure 4. Opens (infinite impedance) are caused by a physical separation of the conductor or the shield due to stretching or mishandling of a transmission line. Equipment vibrating against a transmission line will cause the sheath to become frayed and display a trace similar to figure 5. Fraying causes an increase in transmission line impedance.

6. Since TDR is a high-resolution pulse system which simulates a wide band of frequencies (from 0 to approximately 2 gigahertz), it cannot test narrow band devices such as waveguides, high pass filters, or low pass filters. TDR provides a quick, efficient method of detecting physical transmission line damage (such as crimps, abrasions, fluid contamination, and connector corrosion).

7. TIME DOMAIN REFLECTOMETRY (TDR) TEST SET.

- 8. The Tektronix 1502-4 TDR test set is a small, lightweight, battery or ac powered, portable test set used to test rf transmission lines and antennas (figure 6). For a detailed description of the TDR test set, refer to Tektronix 1502 Time Domain Reflectometer Instruction Manual.
- 9. The TDR test set is powered by 115-volt ac, 60-hertz power or an internal 12-volt battery pack. With a full charge it will operate for a minimum of 5 hours (including 20 chart recordings). The battery pack will fully charge in 16 hours when connected to an ac power source and the TDR test set is off. (The battery pack will not overcharge if the charger is left on longer than 16 hours.)
- 10. Front panel controls are shown in figure 7 with a brief description of each.
- 11. The TDR test set plug-in compartment will accept either the X-Y output module or the Tektronix Y-T chart recorder. (The 1502-4 TDR test set furnishes both items.) The X-Y output module provides an interface for an X-Y recorder.

A1-F18AC-WRM-000

Change 1

Control

015 00 Page 3

The Y-T chart recorder uses a heated stylus to record on heat-sensitive chart paper. The grids on the chart paper correspond directly with the grids on the TDR test set displays therefore, a transmission line signature is expanded horizontally at a ratio of five to one when compared with the TDR test set display as shown in figure 8.

12. **INITIAL TURN ON AND ADJUSTMENT.** The procedure below is to be done before testing transmission lines and antennas.

Position

a. Set front panel control as follows:

FOCUS	Midrange
INTENSITY	Midrange
ZERO REF	Fully cw
POSITION	Midrange
mp/DIV	500
DISTANCE	000
FEET/DIV	1
X1-X.1	X1
CABLE DIELECTRIC	SOLID
	POLY

- b. Pull the POWER switch on.
- c. Adjust INTENSITY and focus controls for a clear bright trace.
- d. Adjust POSITION controls to set trace two divisions below horizontal centerline.
- e. Attach precision, 50-ohm cable to CABLE connector.
- f. Adjust ZERO REF SET control until incident pulse edge (first vertical rise) is located on reference or second vertical line (figure 9). Reflected pulse from open end of 50-ohm transmission line should be a second vertical rise and should be three horizontal divisions right of reference line.
- g. Adjust ZERO REF SET control throughout its range to verify that incident pulse edge can be set on any vertical graticule.

- h. Return incident pulse edge to reference line.
- i. Adjust DISTANCE dial to 050 and verify top of reflected pulse (second rise) is two vertical divisions above centerline. If necessary, adjust GAIN control (screwdriver adjustment).
- j. Press and hold ZERO REF CHECK button and verify that incident pulse edge returns to vertical reference line.
 - k. Release ZERO REF CHECK button.
 - 1. Adjust DISTANCE dial to 000.
- m. Place mp/DIV switch in 50 and adjust POSI-TION controls so top of incident pulse is on horizontal centerline.
- n. Press NOISE FILTER button and verify a reduction in displayed noise and scan rate. Press NOISE FILTER button again to release.
 - o. Place mp/DIV switch in 500.
- p. Press and hold RECORD/CAMERA switch in CAMERA. Complete crt should be flooded on retrace to illuminate graticule when taking photographs.
 - q. Release RECORD/CAMERA switch.
- r. Press and hold RECORD/CAMERA switch in RECORD. A bright spot should appear at left edge of crt.
- s. Release RECORD/CAMERA switch. Slow scan of spot will trace displayed waveform. When scan is complete, TDR test set will automatically return to its normal mode of scanning. (If a chart recorder is installed, a recording will be made.)
- 13. **TDR TESTING.** Testing procedures are provided using an impedance reference of 50 ohms as below:
- a. With TDR test set at test location, do initial turn on and adjustment procedure (paragraph 12).

A1-F18AC-WRM-000 Change 1



Do not connect live circuit transmission lines to input of TDR test set. Voltages in excess of 5 volts can damage sampling bridge or tunnel diode.

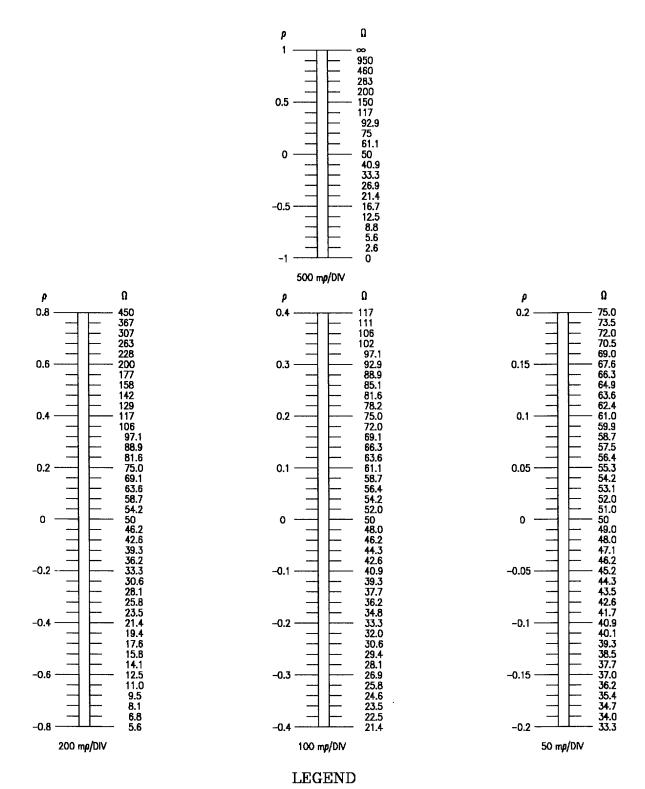
Bleed static charge from transmission lines before connecting to TDR test set. The 50-ohm termination and BNC adapter may be used to bleed any static charge from transmission lines. When testing an antenna, maintain a safe distance from transmitters that may be keyed at antenna receiving frequency. Electromagnetic radiation can cause damage if transmitted into TDR test set.

NOTE

A 50-ohm extender cable may be used between TDR test set and precision 50-ohm cable when needed. The ZERO REF SET control should be adjusted to set connection between extender cable and precision 50-ohm cable on reference line.

b. Using adapter or adapter cable, connect precision 50-ohm cable to transmission line to be tested.

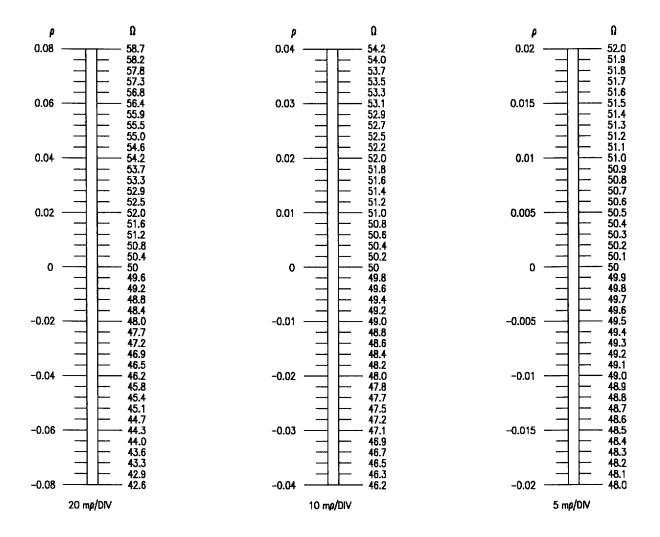
- c. Adjust the mp/DIV, FEET/DIV, and POSITION controls as necessary to obtain signature of transmission line under test on display. For correct cable parameters refer to applicable system(s) manual. (Settings for mp/DIV and FEET/DIV controls are given on all graphs.)
- d. Compare display with graph or transmission line specifications. If fault exists, proceed with (paragraph 14).
- 14. **USE.** The primary use of the time domain reflector consists of locating point of failure and determining type of fault. Figures 2 through 5 show the different types of fault. The following procedure is used to locate point of failure.
 - a. Verify that distance dial is set to 000.
- b. Adjust ZERO REF SET control until beginning of transmission line or bad segment is set on vertical reference line.
- c. Adjust DISTANCE dial until fault is positioned on vertical reference line. Indication on DISTANCE dial times multiplier given distance to fault.



LOCATE THE COLUMN OVER THE SETTING OF THE mp/DIV SWITCH, FIND THE ρ Value on the left side of the column and read the impedance on the right side corresponding to the ρ value.

Figure 1. Impedance Nomograph (Sheet 1)

F/A-18-WRM-(226-1)02-CATI



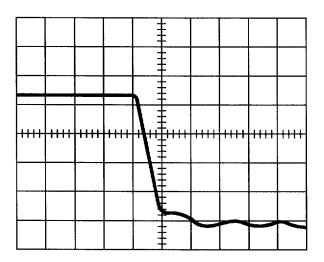


Figure 2. Shorted Cable

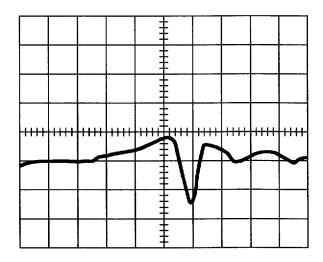


Figure 3. Crimped Cable

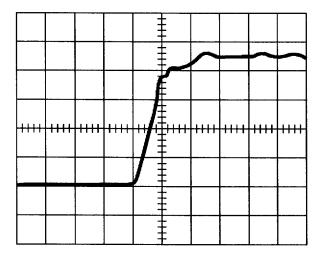


Figure 4. Open Cable

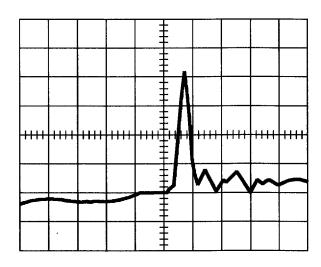
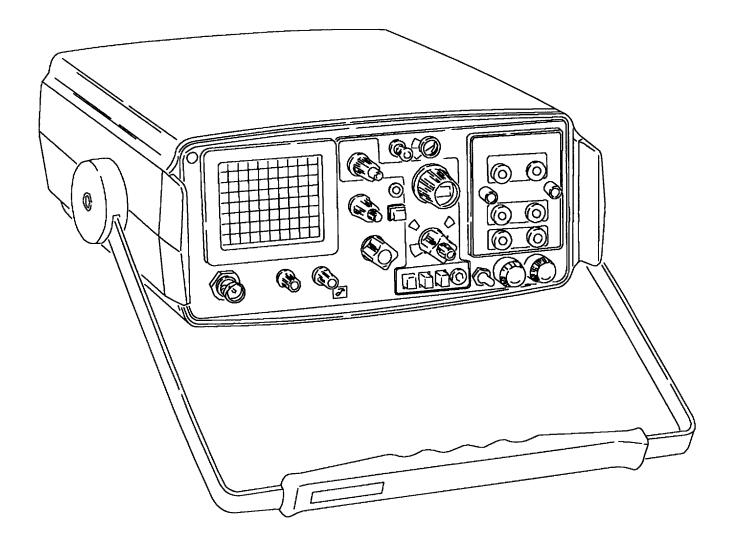
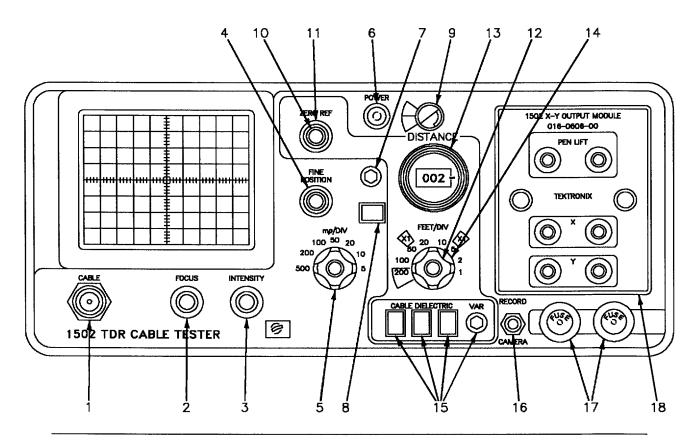


Figure 5. Frayed Cable





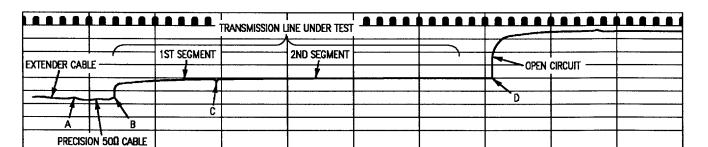
INDEX NO.	CONTROL/INDICATOR	FUNCTION
1.	CABLE	BNC Connector – delivers 110 ps risetime pulse to the test cable and receives the reflected return pulse.
2.	FOCUS	Adjusts the focus of the crt electron beam.
3.	INTENSITY	Controls the brightness of crt display.
4.	POSITION/FINE	Vertical position control of the crt display. The outer control is a course adjustment and the inner control is a fine adjustment.
5.	m ρ/DIV	Selects the vertical deflection factor – 5 mp/div to 500 mp/div (5–2–1 sequence).
6.	POWER	Push-pull, off-on switch (pull for on) — does not affect the battery charging circuit.
7.	GAIN	Screwdriver adjust to set the gain of the vertical amplifier.
8.	NOISE FILTER	Reduces display noise. Display rate is reduced by a factor of 10.
9.	BATTERY	Meter to indicate the relative charge of the power pack.
10.	ZERO REF CHECK	Momentary contact pushbutton. When pushed, checks the horizontal location of the incident pulse on the crt when the DISTANCE dial is being used.

F/A-18-WRM-(228-2)02-CATI

Figure 7. Front Panel Controls (Sheet 1)

INDEX NO.	CONTROL/INDICATOR	FUNCTION
11.	ZERO REF SET	Horizontal pulse position control for crt display. Sets the incident pulse edge to vertical reference line of the crt
		when the DISTANCE dial is at 000 or the ZERO REF CHECK button is pushed.
12.	MULTIPLIER	Two-position switch (red control) for X.1 or X1 multiplier. Affects both the DISTANCE dial and the FEET/DIV control.
13.	DISTANCE	Indicates the distance from the 1502 to the point on the cable where the display window begins. Two ranges: 100 feet at X.1 or 1000 feet at X1. Disabled when the FEET/DIV is at 200 (FIND).
14.	FEET/DIV	Selects the horizontal deflection factor: X1 = 1-200 FT/DIV X.1 = 1-20 FT/DIV
15.	CABLE DIELECTRIC SOLID POLY SOLID PTFE OTHER VAR	Three pushbuttons and a screwdriver adjust. Selects the proper velocity of propagation. VAR from 0.55 to 1.0 when the OTHER pushbutton is pressed. Fully CW is for air dielectric. VAR control has reference marks every 30° to indicate relative propagation constants.
16.	RECORD/CAMERA	Two-position lever switch; pushed up and then released, it starts X-Y recorder or a chart recorder; pushed down, it floods the crt during retrace to display graticule for photography.
17.	AC LINE FUSES	Protection fuses for line power and battery charging circuits (0.5A fuses for 115VAC; 0.3A fuses for 230VAC).
18.	X-Y OUTPUT MODULE	The standard plug—in module for the 1502. Used to drive an external X—Y Chart Recorder.
	X, Y, and PEN LIFT	Six front panel jacks used for driving an external X-Y recorder. X jacks are for horizontal drive. Y jacks are for vertical drive. PEN LIFT jacks are for pen control.
	Y-T CHART RECORDER (Not shown)	An optional Tektronix Y-T chart recorder which replaces the X-Y OUTPUT MODULE.
	STYLUS POSITION	Screwdriver adjustment on Y—T CHART RECORDER front panel. Adjusts the stylus to the same level as the crt display.

Change 1



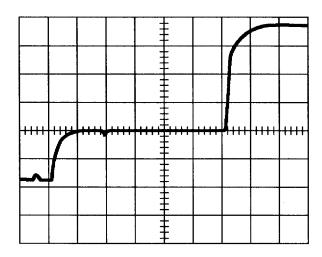


Figure 8. Comparison of Tape and Display

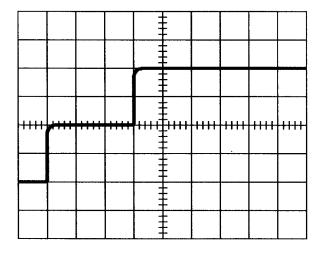


Figure 9. Adjustment Display

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

INSTALLATION, REMOVAL AND ROUTING OF COAXIAL CABLE AND BRAIDED HARNESS ASSEMBLIES

Reference Material

Aircraft Electric and Electronic Wiring	NAVAIR 01-1A-505
Line Maintenance Procedures	A1-F18AC-LMM-000
Wiring Diagrams	A1-F18A()-WDM-000
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Cable/Wiring Assembly Data Index	WP001 01
Reference Designation to Work Package Index	WP001 02
Sealing Of Electrical Cable Assemblies	WP022 00
Sealing Of Electrical Components	WP024 00

Alphabetical Index

Subject	Page No
Installation Procedures	2
Installation and Removal of Cable Assemblies, Figure 1	4
Introduction	1
Materials Required	1
Support Equipment Required	1
Removal Procedures	

Record of Applicable Technical Directives

None

1. INTRODUCTION.

2. This work package describes the procedures for the installation, removal and routing of F-18 cable assemblies. The step by step nature of this work package is intended to be a guide in the general use of the Wiring Repair and Wiring Diagrams manuals for removing, installing, routing and repairing cable assemblies.

Support Equipment Required

None

3. Recommended tooling and material will be specified in applicable work packages.

Materials Required

None

NOTE

74A760209 Cable assembly has been chosen as an example to point out the steps necessary for removal or installation of typical cables. The details that follow will be keyed to the 602 09 work package. However, the steps done should be considered typical for all work packages in the A1-F18AC-WRM-000 series of Wiring Repair manuals. Before terminations are secured, refer to the cable assembly work package and note special instructions, if applicable, from the notes on page 2 of the work package.

4. **REMOVAL PROCEDURES.** See figure 1.

- a. Make sure electrical and hydraulic power are off (A1-F18AC-LMM-000). Disengage all connectors from their mating interconnects. Make sure all connectors of the cable assembly to be removed are disengaged. Refer to the Cable/Wiring Assembly Data Index (WP001 01) or the Reference Designation to Work Package Index (WP001 02) of this manual.
- (1) If the cable assembly identification number is known, refer to the Cable/Wiring Assembly Data Index (WP001 01) and determine the volume and work package number desired. Refer to detail A.
- (2) If the reference designation of a connector (or other end item) is known, the cable assembly identification number can be found along with the desired volume and work package by referencing the Reference Designation to Work Package Index (WP001 02). Refer to detail B.
- b. When the applicable work package is located the reference designations of all connectors should be noted from the parts list. Refer to detail C.
- c. When the reference designations of all the connectors are known, reference should be made to the A1-F18A()-WDM-000 manuals Reference Designation Index.
- d. Locate in this index the reference designations of the connectors in the cable assembly to be removed. Refer to detail D.
- e. Locate each reference designation and record the location illustration number. Note that for the ex-

ample shown in Figure 1, the cable assembly routing spans from location illustration numbers L715 through L716. Refer to detail D. Illustrations show the access door locations and routing of cable assemblies with their related installation clamping. Refer to detail E.

- f. Refer to each location illustration to find the required reference designation.
- g. The cable assembly layout can be projected over several location illustrations. The layout of the complete cable assembly should be studied before an attempt is made to loosen or remove the cable clamps. Observe the locator callouts on figure 1 for projection to other location illustrations. Refer to detail F.
- h. Make sure all reference designations are accounted for and all terminations to splices and terminal blocks are noted.
- Remove wires from terminal blocks and splice areas.
- j. Remove or loosen cable clamps as necessary from areas along the cable to be removed.
- k. When a connector must be removed from the cable to extract the cable assembly from the aircraft, proceed by locating the applicable connector number in the Alphabetical Index, in the front of this manual, then refer to the work package called out.
- 1. When wires are terminated with those of another cable assembly in a common connector, it may be necessary to remove the connector pins or sockets of those wires from the common connector.
- m. Care should be exercised when removing the cable assembly from the aircraft to prevent entanglement with other cable assemblies routed in the same areas.

5. **INSTALLATION PROCEDURES.** See figure 1.

a. Make sure electrical and hydraulic power are off (A1-F18AC-LMM-000). When installing cable assemblies use the A1-F18()-WDM-000 Reference Designation Index to locate the reference designations associated with the cable assembly being installed. Refer to detail D.

b. From this index, record the Location and Illustration numbers, then refer to them (L715 00 and L716 00 for this example only).

NOTE

Care must be exercised when installing cable assemblies. Consideration should be given to abrasion, vibration, clearance of moving parts and excessive flexing. Route cable assemblies so that they are mechanically and electrically sound and neat in appearance.

- c. After studying these location illustrations, lay the cable out loosely in place.
- d. Route the cable assembly along its intended path and secure it in place with the cable clamps.
- e. If cable clamps are missing or have not been installed, clamp type may be determined by referring to the parts list with the location illustrations.

CAUTION

Avoid excessive tightening of cable, clamps and spot ties on coaxial (coax) cable. The dielectric of some coax cables is made of soft material and can be easily damaged. Route coax cable as directly as possible. Avoid unnecessary or sharp bends to preserve dielectric integrity.

f. Excess length can be compensated for by leaving some slack between the support clamps.

- g. Tighten cable clamps.
- h. Mate applicable connectors with their interconnects.
- i. Terminate loose wires or cable assembly branches to splice areas, common connectors or terminal strips. Refer to A1-F18AC-WRM-010 through A1-F18AC-WRM-070 for the correct Work Package and Wire List, as applicable.
- j. First find the cable assembly number in the Cable/Wiring Assembly Data Index (WP001 01), then refer to the applicable volume and work package. Refer to detail A.
- k. Refer to the parts list of the referenced work package and note the reference designation and part number. Refer to detail C.
- l. Refer to the Wire List of the referenced work package and locate the applicable reference designation and, if necessary, the repair work package required for the particular wire. Refer to detail G.
- m. Procedures for sealing can be found in work packages 022 00 and 024 00.
- n. Sealing compound procedures will be found in work package 022 00.
- o. Test applicable system(s) to be sure of failure elimination and cable assembly integrity. Refer to A1-F18AC-()-200.

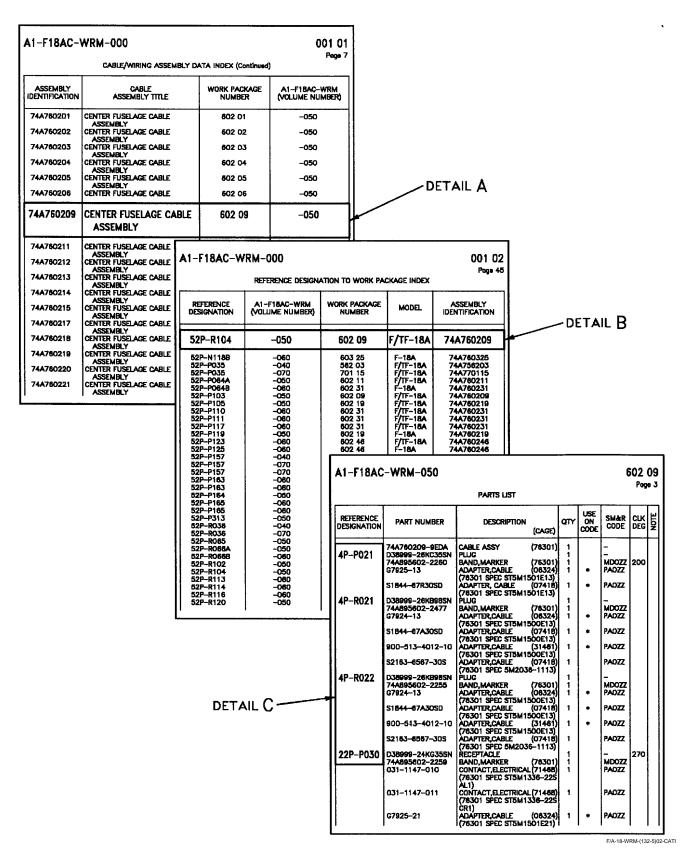


Figure 1. Installation and Removal of Cable Assemblies (Sheet 1)

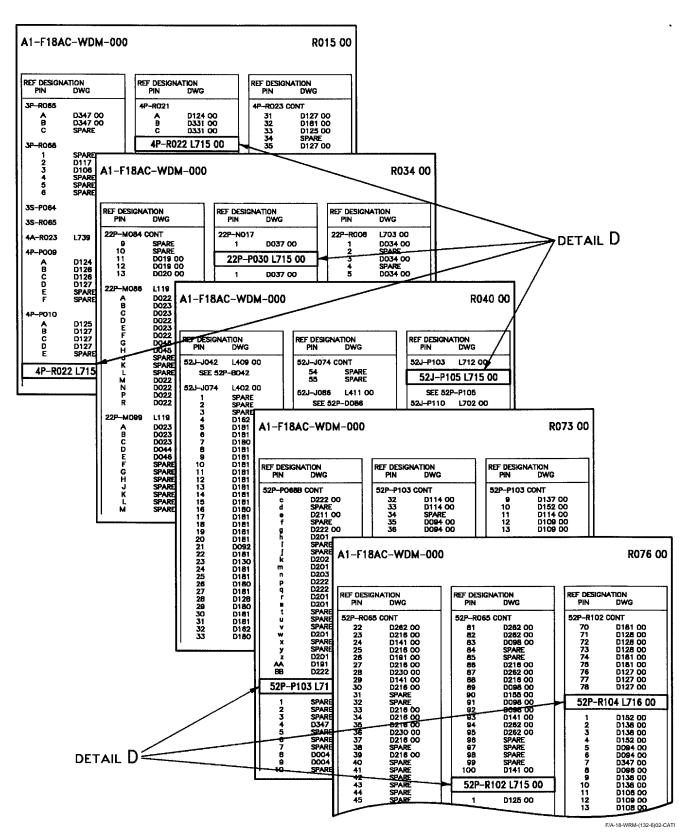
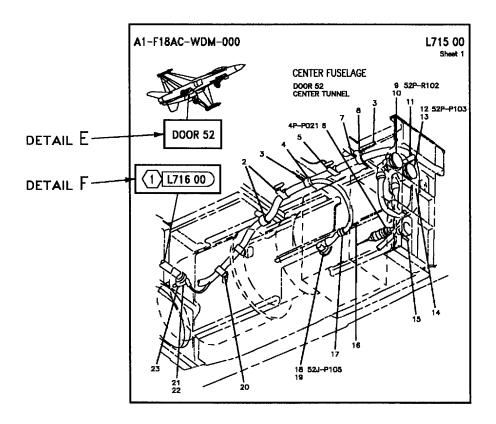


Figure 1. Installation and Removal of Cable Assemblies (Sheet 2)



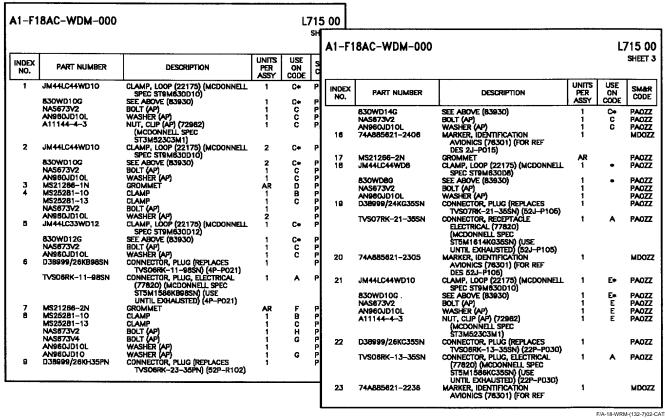
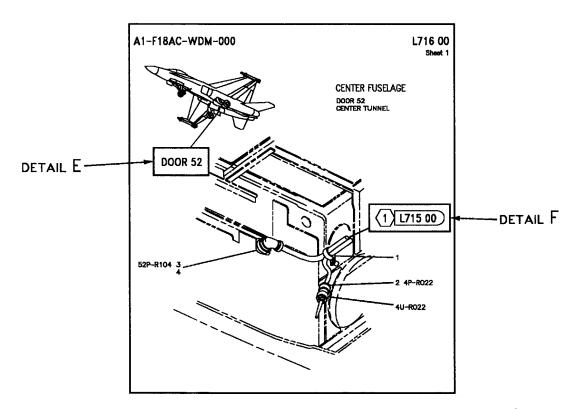


Figure 1. Installation and Removal of Cable Assemblies (Sheet 3)



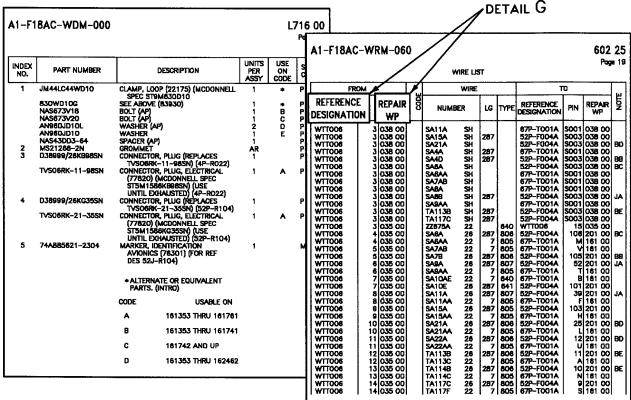


Figure 1. Installation and Removal of Cable Assemblies (Sheet 4)

F/A-18-WRM-(132-8)02-CATI

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA SEALING OF ELECTRICAL CABLE ASSEMBLIES

Reference Material

Line Maintenance Procedures	-F18AC-LMM-000
Electrical Bonding, Sealing and Electromagnetic Compatibility (EMC)	
Protection	WP037 00

Alphabetical Index

Subject				
EMI Sealing Procedures	3			
Introduction				
Materials Required	2			
Procedure	2			
Sealing EMI Wire Bundles, Figure 2	5			
Sealing Wire Bundles, Figure 1	4			
Support Equipment Required	1			

Record of Applicable Technical Directives

None

1. INTRODUCTION.

Support Equipment Required

2.	Sealing	the	airframe	against	foreign	object	damage
wł	nile insta	lling	g electrica	al cable	assembl	ies is	described
in	this wo	rk p	ackage.				

Part Number or	
Type Designation	Nomenclature

Model 250-12 Sealant Gun

Materials Required

Specification or Part Number	Nomenclature
0-T-620	1,1,1-Trichloroethelyne
	Solvent
-	Masking Tape
GGD226 TYPE 1	Wooden Tongue
	Depressor
CCC-C-440 TYPE 1	Cheesecloth,
CLASS 1	Commercial
No. 10/20	Ground Cork
MILS83430CLASSA-4	Sealing Compound
MILS83430CLASSB-1/4	Sealing Compound

3. PROCEDURE.

WARNING

Trichloroethelyne is toxic to skin, eyes, and respiratory tract. Skin and eye protection required. Avoid repeated or prolonged contact. Good general ventilation is normally enough.

a. Clean surfaces to be sealed using trichloroethelyne. Apply trichloroethelyne with clean, moistened cloth to applicable surfaces. Wipe dry before trichloroethelyne evaporates.

WARNING

Sealing compound is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection required. Avoid repeated/prolonged contact. Use only in well ventilated areas. Keep away from open flames or other sources of ignition.

- b. Mixing of sealers should be accomplished using the instructions furnished with the sealing compound.
 - c. Mask areas to be protected from sealants.
- d. Remove cable ties (plastic tie-down straps) within 6 inches of the area to be sealed.

e. Where cable clamps restrict the flow of sealants in and around cable assemblies or wires, loosen clamps so that sealant will flow under clamps.

WARNING

Sealing compound is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection required. Avoid repeated/prolonged contact. Use only in well ventilated areas. Keep away from open flames or other sources of ignition.

- f. Inject sealant in and around cable assemblies and under cable clamps (figure 1, detail A).
 - g. Tighten cable clamps.

WARNING

Sealing compound is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection required. Avoid repeated/prolonged contact. Use only in well ventilated areas. Keep away from open flames or other sources of ignition.



When ground cork is used, apply a heavy coat of MILS83430CLASSA-4 sealing compound over fillet to prevent the ground cork from absorbing fuel or moisture.

NOTE

MILS83430CLASSB-1/4 sealing compound may be combined in a ratio of 1 part sealing compound to 1.5 parts ground cork to fill voids exceeding 1/2 inch. Voids to be filled with this mixture must exist between cable assemblies and conduit or cable assemblies and bulkheads.

- h. Apply a fillet of sealant around the cable assembly on both sides of the bulkhead when accessible (details A and B).
- i. Remove masking tape from protected areas and smooth sealant around clamps with a wooden tongue depressor.

4. EMI SEALING PROCEDURES.

- a. Refer to paragraph 3a for cleaning procedure.
- b. Follow special instructions in A1-F18AC-LMM-000, when assembling EMI shielding and boots.

c. Mask areas to be protected from sealants.

WARNING

Sealing compound is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection required. Avoid repeated/prolonged contact. Use only in well ventilated areas. Keep away from open flames or other sources of ignition.

- d. Inject sealant into wire mesh buildup at EMI boot areas.
- e. Fashion sealant to a smooth surface using wooden tongue depressor (figure 2, detail A).
- f. Remove masking tape and clean excess or unwanted sealant from area by use of a clean dry wiper.

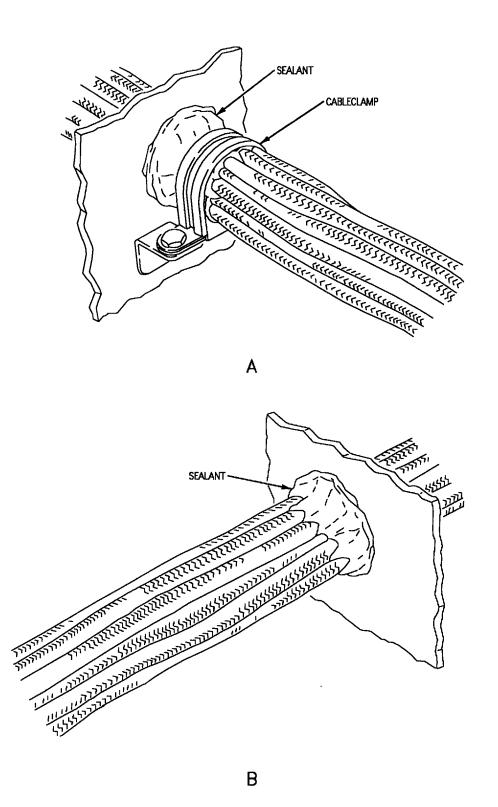


Figure 1. Sealing Wire Bundles

F/A-18-WRM-(157-1)02-SCAN

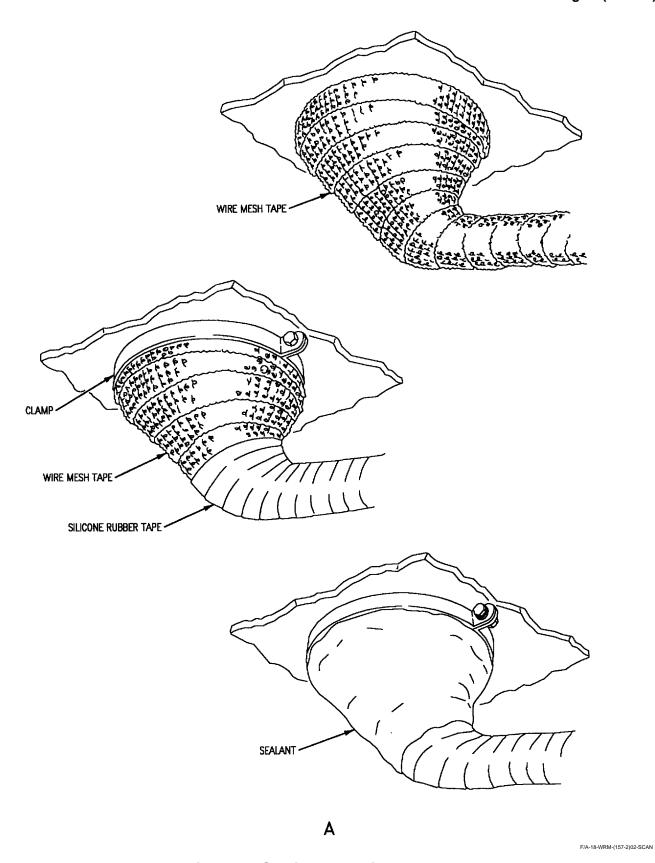


Figure 2. Sealing EMI Wire Bundles

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA SEALING OF ELECTRICAL COMPONENTS

Reference Material

None

Alphabetical Index

Subject	Page No.
Introduction	1
Materials Required	1
Procedure	2
Sealing Electrical Components, Figure 1	2
Support Equipment Required	1

Record of Applicable Technical Directives

None

Specification or

1. INTRODUCTION.

Materials Required

2. Sealing of electrical components against foreign ob-
ject damage and corrosion prevention is described in
this work package. Sealants meeting the requirements
for MIL-A-46146 will be used.

Support Equipment Required

Part Number or Type Designation Nomenclature

Model 250-12 Sealant Gun

Part Number Nomenclature

MILA46146TY3 Adhesive Sealant

MMS409 Cleaning Compound

MS122 Fluorocarbon Lubricant

3. PROCEDURE.

a. Inspect all connections for correct attachment.

WARNING

Cleaning compound is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection required. Avoid repeated/prolonged contact. Use only in well ventilated areas. Keep away from open flames or other sources of ignition.

b. Clean all surface areas to be sealed with cleaning compound.

WARNING

Adhesive is toxic to skin, eyes, and respiratory tract. Skin and eye protection required. Avoid repeated or prolonged contact. Good general ventilation normally adequate.

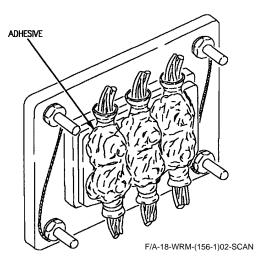


Figure 1. Sealing Electrical Components

c. Apply a thin coat (1/8-inch thick) of adhesive over the terminations.



To prevent corrosion due to condensation, care should be taken to eliminate voids and air entrapments.

- d. When filling cavities avoid air entrapment by using a fine pointed nozzle and start filling from the bottom up.
 - e. Allow adhesive to cure for 72 hours.
- f. Handling of the assemblies can be done within 2 to 4 hours after which the surface area of the adhesive should be tack free.
- g. When adhesive will come into contact with a removable cover, apply a fluorocarbon lubricant (MS122 or equivalent).

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE **WIRING REPAIR WITH PARTS DATA**

REPAIR OF SINGLE CONDUCTOR NON-SHIELDED WIRE

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Wire Type List	WP004 00

Alphabetical Index

Subject	Page No.
Centering Sealing Sleeve, Figure 5	7
Completed Splice Repair, Figure 7	8
Conductor Splices, Table 1	3
Crimping Jumper Wire, Figure 4	5
Introduction	1
Installing Jumper Wire, Figure 2	3
Materials Required	2
Procedure	2
Removal of Harness Cover, Figure 1	2
Sealing Sleeve, Figure 6	7
Spot Tie, Figure 9	9
Stripping Wire and Jumper Wire, Figure 3	4
Support Equipment Required	1
Wrapping Exposed Repair Area, Figure 8	8

Record of Applicable Technical Directives

None

1. INTRODUCTION.

2. This work package provides general repair procedures for single conductor non-shielded wiring under a harness braid.

Support Equipment Required

Part Number or Type Designation	Nomenclature
3308AS100	Repair Set - Wire and Connector
HT-900	Heat Tool
1317AS100-1	Nitrogen Servicing Unit
	- NAN-3

F/A-18-WRM-(219-1)02-SCAN

Materials Required

Specification orPart Number	Nomenclature
MIL-I-46852, TYPE 2, 1.0000IN.BLK	Insulation Tape
MIL-I-23594, TYPE 2, 1/2IN.WIDE	Insulation Tape
MIL-T-43435 TYPE-2 SIZE-3 FINISH-C	Lacing Tape
See Table 1	Splice, Conductor

NOTE

Size required to be determined by technician.

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- a. Remove at least 3 inches of harness cover from each side of damaged wire(s).
- b. Wrap ends of cut harness cover with several turns of insulation tape (MIL-I-23594, TYPE 2, 1/2In. WIDE).

NOTE

Splices must be staggered when more than one wire is to be repaired to prevent bundle enlargement.

c. Remove at least 2 inches of damaged wire(s), as applicable, so that only good wire remains.

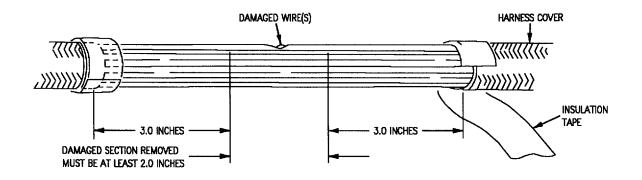


Figure 1. Removal of Harness Cover

- d. Separate damaged wire(s) from undamaged wires. Wrap undamaged wires with insulation tape (MIL-I-23594,TYPE 2, 1/2In. WIDE) using a 50 percent over wrap as close to harness cover as possible.
- e. Refer to Wire Type List (WP004 00) and determine jumper wire size required. Cut jumper wire so that it will be same length as wire which was removed.

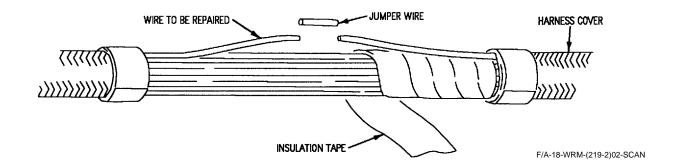


Figure 2. Installing Jumper Wire

f. Based on wire(s) size to be spliced, select applicable conductor splice part number from table 1.

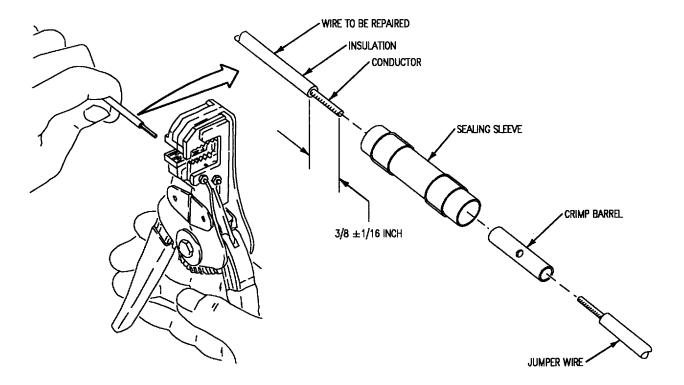
Table 1. Conductor Splices

Part Number	Color Stripe	Wire Sizes AWG	Maximum Wire Insulation Size (Inch)
D-436-36	Red	20, 22, 24	3/32
D-436-37	Blue	16, 18, 20	7/64
D-436-38	Yellow	12, 14, 16	3/16

NOTE

If more than one of the damaged wires were severed, mating wires may not be readily apparent since wires of compact bundles are not identified under the braid. To determine mating wires, make a continuity check of severed wires, using applicable cable/wiring assembly data work package in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070.

- g. Using 45-1633 wire strippers supplied with wire and connector repair set, strip insulation from wire to be repaired and jumper wire.
- h. Slide sealing sleeve over one end of wire to repaired and install crimp barrel on end of wire.



F/A-18-WRM-(219-3)02-SCAN

Figure 3. Stripping Wire and Jumper Wire

- i. Make sure conductor is visible in center of crimp barrel and crimp wire using GMT 232 crimping tool supplied with wire and connector repair set.
- j. Crimp jumper wire in crimp barrel using GMT 232 crimping tool.

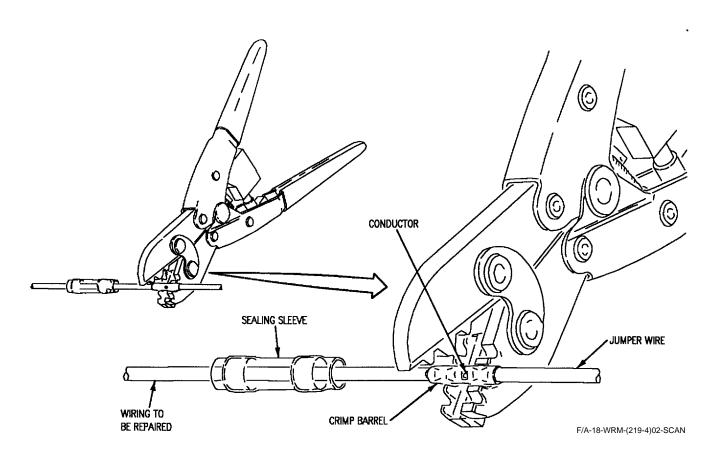


Figure 4. Crimping Jumper Wire

F/A-18-WRM-(219-5)02-SCAN

F/A-18-WRM-(219-6)02-SCAN

k. Center sealing sleeve over crimp barrel.

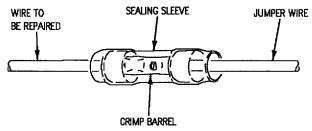


Figure 5. Centering Sealing Sleeve

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

1. Using heat tool, apply heat starting at one end of sealing sleeve until melted insert flows from end of sleeve then move along sleeve until insert at opposite end of sleeve melts and flows along wire.

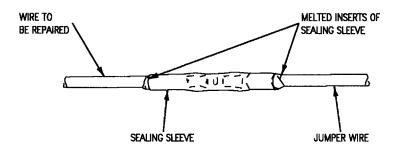


Figure 6. Sealing Sleeve

m. Repeat paragraphs 3.g. through 3.1. to complete splice repair of open end of jumper wire to original wire so that completed splice repair appears as below.

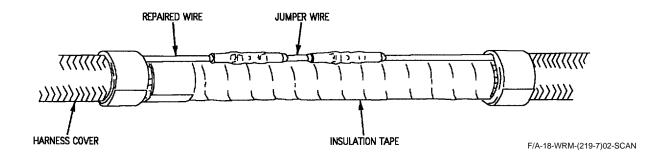


Figure 7. Completed Splice Repair

n. Completely wrap exposed repair area, using insulation tape (MIL-I-46852, TYPE 2, 1.000IN.BLK) with a 50% over wrap.

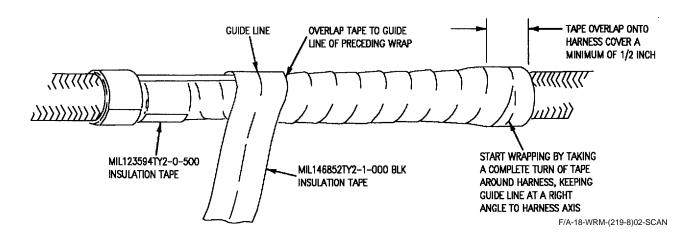


Figure 8. Wrapping Exposed Repair Area

o. Secure insulation tape with a spot tie using lacing tape.

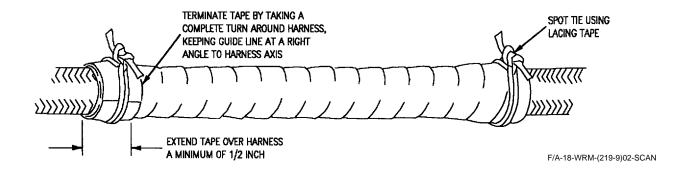


Figure 9. Spot Tie

Change 5 – 15 March 2003

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

REPAIR OF SINGLE CONDUCTOR SHIELDED CABLE

This WP supersedes WP 028 00, dated 1 October 1993.

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Wire Type List	WP004 00

Alphabetical Index

Subject	Page No.
Completed Repair, Figure 5	5
Crimping Conductor Splice, Figure 4	5
Installation of Conductor Splice, Figure 3	3
Installing Tubular Shield Braid, Figure 6	7
Introduction	1
Materials Required	2
M83519/1 and NAS1745 Solder Sleeve, Table 1	4
Procedure	2
Removal of Damaged Wire, Figure 1	3
Shrink Insulation Sleeve, Figure 8	7
Shrink Solder Sleeve, Figure 7	7
Stripping Cable and Jumper Wire, Figure 2	3
Support Equipment Required	1

Record of Applicable Technical Directives

None

1. INTRODUCTION.

Support Equipment Required

2.	Thi	s v	vork	pa	ckage	prov	vides	gen	eral	repair	proce-	
du	res	for	sing	le	condu	ctor	shiel	ded	wire	e.		

Part Number or Type Designation	Nomenclature
3308AS100	Repair Set - Wire and Connector
HT-900	Heat Tool
1317AS100-1	Nitrogen Servicing
	Unit - NAN-3

Change 5

028 00 Page 2

Materials Required

Specification or Part Number	Nomenclature
D-609-XX	Conductor Splice
\square XX	
M23053/4-XXX-0	Insulation Sleeve
NAS1745-XX	Solder Sleeve
\square XX	
RNF100 1-8BLACK	Insulation Sleeve
8660 (3/16-Inch)	Tubular Shield Braid
8661 (5/16-Inch)	Tubular Shield Braid
8664 (5/32-Inch)	Tubular Shield Braid
8674 (1/16-Inch)	Tubular Shield Braid

NOTE

Size required to be determined by technician.

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

a. Remove at least 4 inches of damaged wire so that only good wire remains. See figure 1.

NOTE

Identify applicable cable/wiring assembly in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070, then refer to Wire Type List (WP004 00) for correct wire strippers.

- b. Refer to Wire Type List (WP004 00) and determine jumper wire size required. Cut jumper wire so that it will be same length as wire which was removed.
- c. Using wire strippers identified in WP004 00, strip cable and jumper wire as shown in figure 2.

d. Comb out braided shield and fold back over wire jacket.

NOTE

Use Wire Type List (WP004 00) to determine size of materials required to complete wire repair.

e. Slide insulation sleeve (RNF100 1-8BLACK), tubular shield braid, solder sleeve, insulation sleeve (M23053/4-XXX-0) and conductor splice over end of wire to be repaired and jumper wire. (See figure 3 and table 1).

NOTE

When necessary to determine mating wires between wire being repaired and jumper wire, a continuity test must be made of severed wires, using applicable cable/wiring assembly data work package in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070.

f. Insert wire to be repaired and jumper wire into conductor splice and crimp using GMT 232 crimping tool. See figure 4.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

- g. Slide insulation sleeve (M23053/4-XXX-0) over crimped conductor splice and shrink insulation sleeve using heat tool. See figure 5.
- h. Repeat paragraphs 3c through 3g to complete splice repair of open end of jumper wire to wire to be repaired, then go to paragraph 3i.
- i. Slide tubular shield braid over completed splice repair. While holding tubular shield braid in place comb out tubular shield braid and mesh strands with shield of wire being repaired. See figure 6.

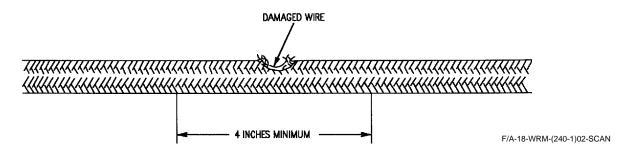


Figure 1. Removal of Damaged Wire

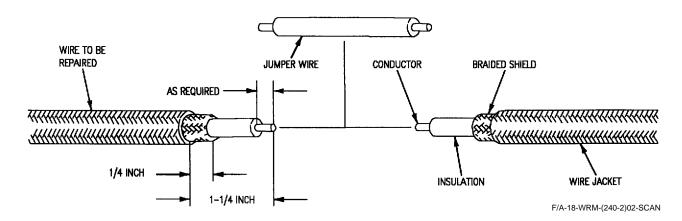


Figure 2. Stripping Cable and Jumper Wire

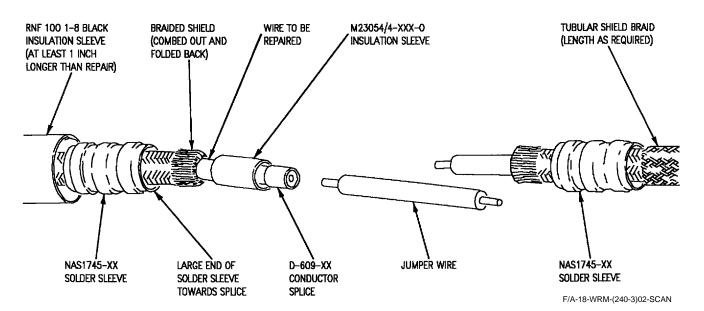
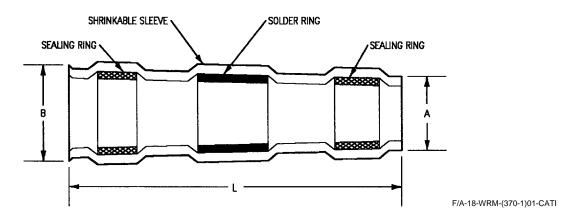


Figure 3. Installation of Conductor Splice

Change 5

Table 1. M83519/1 and NAS1745 Solder Sleeve



Part Number	A Diameter Before Shrinking Minimum (Inch)	B Diameter Before Shrinking Minimum (Inch)	L Length (Inch)
NAS1745-1 M83519/1-1	5/64	3/32	5/8
NAS1745-2 M83519/1-2	7/64	1/8	5/8
NAS1745-3 M83519/1-3	3/16	13/64	5/8
NAS1745-4 M83519/1-5	1/4	15/64	3/4
NAS1745-5	5/64	3/32	5/8
NAS1745-13 M83519/1-1	5/64	3/32	5/8
NAS1745-14 M83519/1-2	7/64	1/8	5/8
NAS1745-15 M83519/1-3	3/16	13/64	5/8
NAS1745-16 M83519/1-5	1/4	15/64	3/4
NAS1745-17 M83519/1-4	15/64	1/4	3/4
NAS1745-18	7/16	15/32	1-7/64
NAS1745-25	33/64	35/64	1-7/64

Color - Transparent blue.

Use HT-900 heat tool to shrink sleeve.

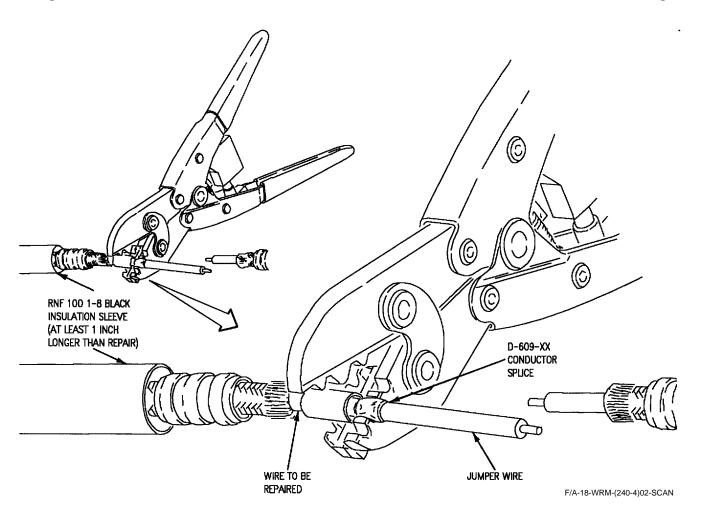


Figure 4. Crimping Conductor Splice

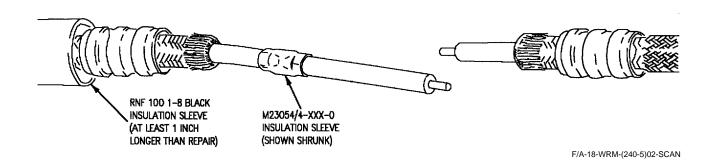


Figure 5. Shrinking Insulation Sleeve

Change 5

j. Slide solder sleeves over ends of tubular shield braid.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

k. Shrink solder sleeves using heat tool. See figure

1. Slide insulation sleeve (RNF100 1-8BLACK) over splice repair. Insulation sleeve should extend at least 1/2-inch past ends of solder sleeves.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

m. Shrink insulation sleeve (RNF100 1-8BLACK) using heat tool so completed repair appears as below. See figure 8.

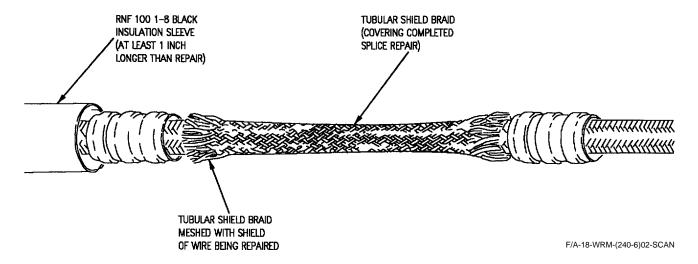


Figure 6. Installing Tubular Shield Braid

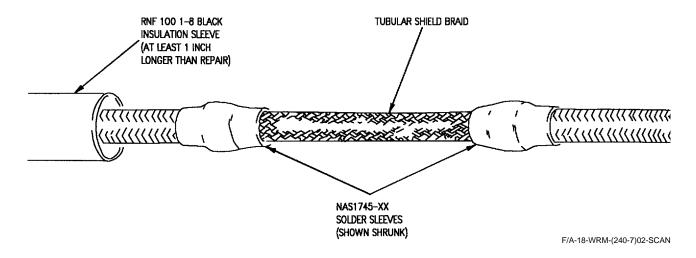


Figure 7. Shrink Solder Sleeves

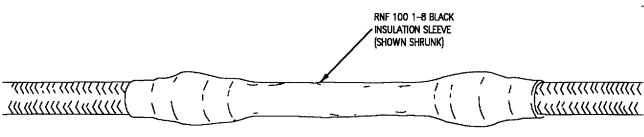


Figure 8. Completed Repair

F/A-18-WRM-(240-8)02-SCAN

Change 5 - 15 March 2003

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

REPAIR OF MULTI-CONDUCTOR SHIELDED CABLE

This WP supersedes WP 030 00, dated 1 October 1993.

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Wire Type List	WP004 00

Alphabetical Index

Subject	Page No.
Completing Splice Repair, Figure 6	7
Crimping Cable and Jumper Wire, Figure 4	5
Installing Insulation Sleeve, Figure 3	3
Introduction	1
Materials Required	2
M83519/1 and NAS1745 Solder Sleeve, Table 1	4
Procedure	2
Removal of Damaged Wire, Figure 1	3
Shrink Insulation Sleeve, Figure 8	7
Shrink Solder Sleeve, Figure 7	7
Shrinking Insulation Sleeve, Figure 5	5
Stripping Cable and Jumper Wire, Figure 2	3
Support Equipment Required	1

Record of Applicable Technical Directives

None

1. INTRODUCTION.

2. This work package provides general repair procedures for single conductor shielded wire.

Support Equipment Required

Part Number or Type Designation	Nomenclature
3308AS100	Repair Set - Wire and Connector
HT-900	Heat Tool
1317AS100-1	Nitrogen Servicing
	Unit - NAN-3

Materials Required

Specification or Part Number	Nomenclature
D-609-XX	Conductor Splice
\square XX	
M23054/4-XXX-0	Insulation Sleeve
NAS1745-XX	Solder Sleeve
\square XX	
RNF100 1-8BLACK	Insulation Sleeve
8660 (3/16-Inch)	Tubular Shield Braid
8661 (5/16-Inch)	Tubular Shield Braid
8664 (5/32-Inch)	Tubular Shield Braid
8674 (1/16-Inch)	Tubular Shield Braid

NOTE

Size required to be determined by technician.

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

NOTE

Splices must be staggered when more than one wire is to be repaired to prevent bundle enlargement.

a. Remove at least 4 inches of damaged wire sothat only good wire remains. See figure 1.

NOTE

Identify applicable cable/wiring assembly in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070, then refer to Wire Type List (WP004 00) for correct wire strippers.

b. Refer to Wire Type List (WP004 00) and determine jumper wire size required. Cut jumper wire so

that it will be same length as wire which was removed.

- c. Using wire strippers identified in WP004 00, strip cable and jumper wire as shown below. See figure 2.
- d. Comb out braided shield and fold back over wire jacket.

NOTE

Use Wire Type List (WP004 00) to determine size of materials required to complete wire repair.

e. Slide insulation sleeve (RNF100 1-8BLACK), tubular shield braid, solder sleeve, insulation sleeve (M23054/4-XXX-0) and conductor splice over end of wire to be repaired and jumper wire. (See figure 3 and table 1).

NOTE

When necessary to determine mating wires between wire being repaired and jumper wire, make a continuity test of severed wires, using applicable cable/wiring assembly data work package in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070.

f. Insert wire to be repaired and jumper wire into conductor splice and crimp using GMT 232 crimping tool. See figure 4

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

g. Slide insulation sleeve (M23054/4-XXX-0) over crimped conductor splice and shrink insulation sleeve using heat tool. See figure 5.

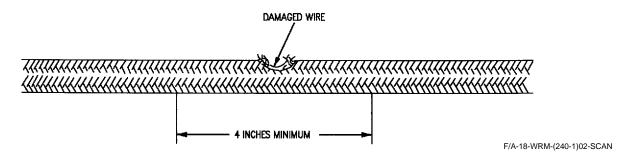


Figure 1. Removal of Damaged Wire

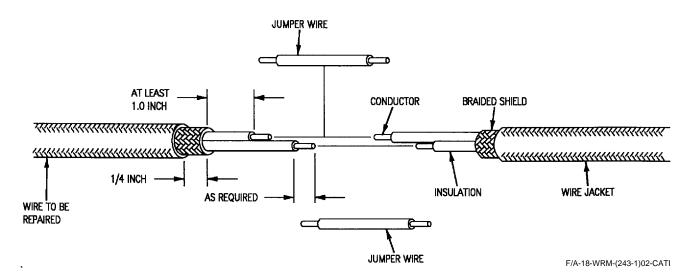


Figure 2. Stripping Cable and Jumper Wire

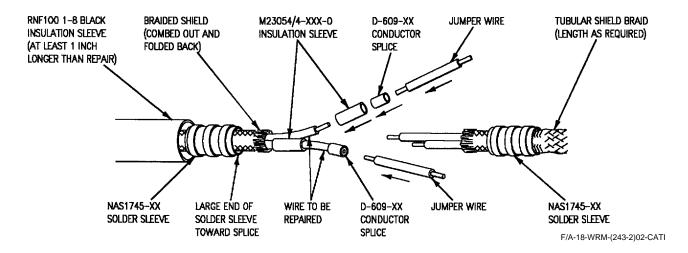
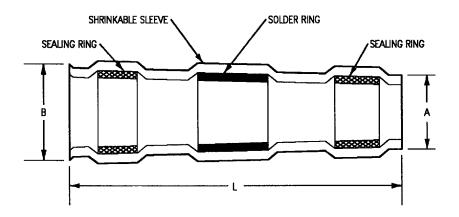


Figure 3. Installing Insulation Sleeve

Change 5

Table 1. M83519/1 and NAS1745 Solder Sleeve



F/A-18-WRM-(370-1)01-CATI

Part Number	A Diameter Before Shrinking Minimum (Inch)	B Diameter Before Shrinking Minimum (Inch)	L Length (Inch)
NAS1745-1 M83519/1-1	5/64	3/32	5/8
NAS1745-2 M83519/1-2	7/64	1/8	5/8
NAS1745-3 M83519/1-3	3/16	13/64	5/8
NAS1745-4 M83519/1-5	1/4	15/64	3/4
NAS1745-5	5/64	3/32	5/8
NAS1745-13 M83519/1-1	5/64	3/32	5/8
NAS1745-14 M83519/1-2	7/64	1/8	5/8
NAS1745-15 M83519/1-3	3/16	13/64	5/8
NAS1745-16 M83519/1-5	1/4	15/64	3/4
NAS1745-17 M83519/1-4	15/64	1/4	3/4
NAS1745-18	7/16	15/32	1-7/64
NAS1745-25	33/64	35/64	1-7/64

Color - Transparent blue.

Use HT-900 heat tool to shrink sleeve.

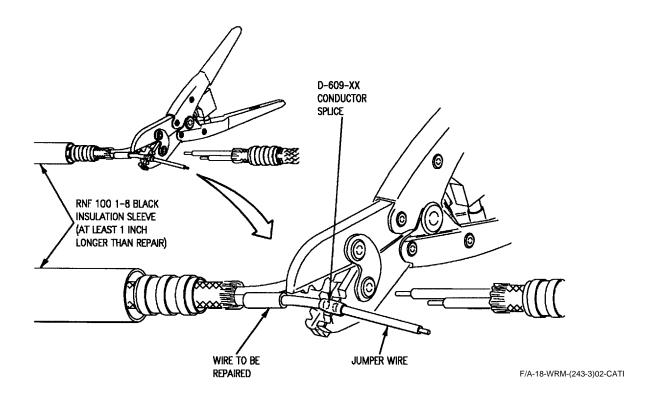


Figure 4. Crimping Wire and Jumper Wire

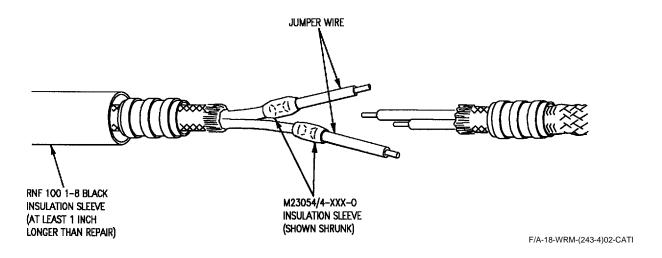


Figure 5. Shrinking Insulation Sleeve

Change 5

930 00 Page 6

Н

- h. Repeat paragraphs 3c through 3g to complete splice repair of open end of jumper wire to wire to be repaired, then go to paragraph 3i.
- i. Slide tubular shield braid over completed splice repair. While holding tubular shield braid in place comb out tubular shield braid and mesh strands with shield of wire being repaired. See figure 6.
- j. Slide solder sleeves over ends of tubular shield braid.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

- k. Shrink solder sleeves using heat tool. See figure 7.
- 1. Slide insulation sleeve (RNF100 1-8BLACK) over splice repair. Insulation sleeve should extend at least 1/2-inch past ends of solder sleeves.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

m. Shrink insulation sleeve (RNF100 1-8BLACK) using heat tool so completed repair appears as below. See figure 8.

F/A-18-WRM-(240-6)02-SCAN

RNF 100 1-8 BLACK
INSULATION SLEEVE
(COVERING COMPLETED
(AT LEAST 1 INCH
LONGER THAN REPAIR)

TUBULAR SHIELD BRAID

Figure 6. Completing Splice Repair

MESHED WITH SHIELD OF WIRE BEING REPAIRED

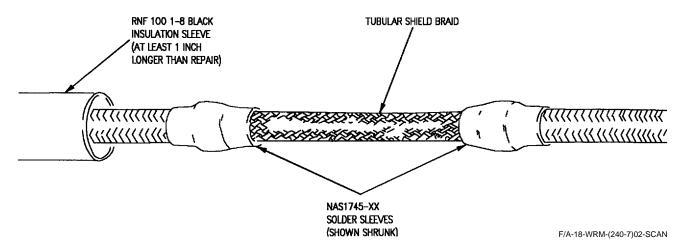
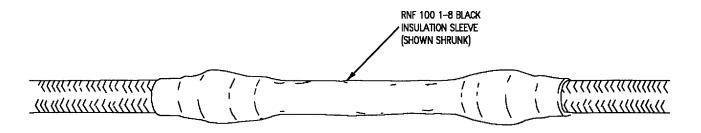


Figure 7. Shrink Solder Sleeves



F/A-18-WRM-(240-8)02-SCAN

1 October 1993

HT-900

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

SHIELDED CABLE SPLICE TERMINATION

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data General Wiring Repair Procedures	A1-F18AC-WRM-000
Splice Combinations and End Caps	WP035 00

Alphabetical Index

Subject	Page No.
Assembly Procedure	2
Centering Soldering Ring Over Shield Joint Figure 5	4
Conforming Tubular Braid Figure 4	3
Description	1
Installing Tubular Shield Braid Figure 3	3
Materials Required	2
Shrinking Solder Sleeve Figure 6	4
Solder Sleeve Table 1	5
Splice Center Conductors Figure 2	2
Strip Shielded Cable Figure 1	2
Support Equipment Required	1
Tubular Shield Braid Table 2	5

Record of Applicable Technical Directives

None

1. DESCRIPTION. 2. This work package describes the procedures and tools necessary to terminate a shielded cable splice. Support Equipment Required Part Number or Type Designation Nomenclature 1317AS100-1 Nitrogen Servicing Unit NAN-3

Heat Tool

Materials Required

Specification

or Part Number Nomenclature

SN60WRMAP2-0-040

Solder Solder Sleeve

See Table 1 See Table 2

Tubular Shield Braid

3. ASSEMBLY PROCEDURE.

4. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

NOTE

A maximum of three center conductor splices shall be under a single shield boot.

a. Strip shielded wire/cable to specified dimension. Maximum length is 1 inch times number of splices.

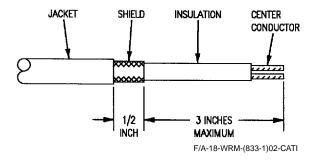


Figure 1. Strip Shielded Cable

See figure 1.

NOTE

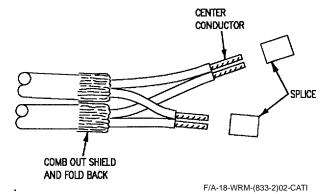
Leave wire/cable at its longest allowed length.

- b. Comb out and fold shield back over wire/cable jacket.
- c. Evenly position or line up shielding of wires/cables which have center conductors that terminate at the same splice.

NOTE

Stagger splices and their end caps in multiple splice applications to prevent harness enlargement.

d. Splice center conductors. Refer to WP035 00. See figure 2.



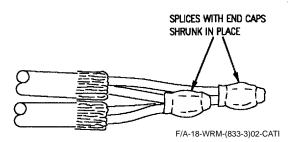
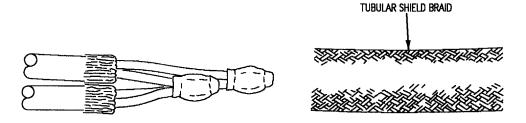


Figure 2. Splice Center Conductors

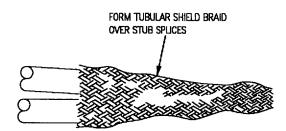
e. Install a length of tubular shield braid (table 2) over splices and over but not beyond folded braided shield. See figure 3.



F/A-18-WRM-(833-4)02-CATI

Figure 3. Installing Tubular Shield Braid

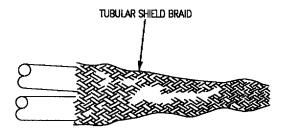
- f. Hold tubular braid in position and conform it to existing configuration.
- g. Twist tubular braid at splice end and trim off excess length. See figure 4.

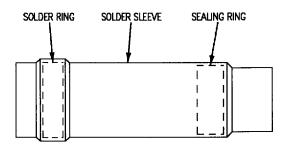


F/A-18-WRM-(833-5)02-CATI

Figure 4. Conforming Tubular Braid

h. Slide solder sleeve (table 1) over tubular shield braid. Center solder ring over tubular braid/folded shield joint. See figure 5.





F/A-18-WRM-(833-6)02-CATI

Figure 5. Centering Solder Ring Over Shield Joint

i. Position sealing ring against tubular braid end.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.



Separate and, if necessary, isolate the wires in work from the rest of the splice area to prevent heat damage.

j. Shrink solder sleeve using heat tool and reflector starting at the small end. See figure 6.

- k. Melt solder ring, rotating heat tool to assure even heat distribution.
- l. Maintain heat on joint until solder penetrates tubular shield braid.

NOTE

Shrink time will be about 30 seconds. Sleeve may turn brown during heating in the area of the solder ring. This is acceptable unless the sleeve cracks or splits.

m. Allow to cool and trim off any excess sleeve length.

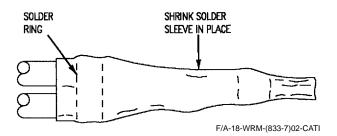
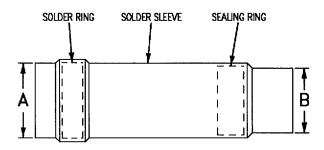


Figure 6. Shrinking Solder Sleeve

Table 1. Solder Sleeve



F/A-18-WRM-(833-8)02-CATI

	A DIAM		AMETER	ETER B DIAMETER	
PART NUMBER	VENDOR	BEFORE SHRINKING MINIMUM (INCH)	AFTER SHRINKING MAXIMUM (INCH)	BEFORE SHRINKING MINIMUM (INCH)	AFTER SHRINKING MAXIMUM (INCH)
D-108-06	06090	11/32	3/16	5/16	1/8
D-108-07	06090	7/16	7/32	11/32	5/32
D-108-08	06090	1/2	3/16	7/16	7/32

COLOR - TRANSPARENT BLUE

TEMPERATURE RANGE: -67°F (-55°C) TO 347°F (175°C)

USE HT-900 HEAT TOOL TO SHRINK SLEEVE

Table 2. Tubular Shield Braid

PART NUMBER	VENDOR	SIZE (INCH)	MATERIAL
8664	16428	5/32	TINNED COPPER
8660	16428	3/16	TINNED COPPER
8661	16428	5/16	TINNED COPPER
TEMPER ATURE RANGE -65°F (-54°C) TO 300°F (149°C)			

Change 2 – 1 March 2001

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

REPAIR OF SHIELDED/NON-SHIELDED BRAIDED WIRING HARNESS

Reference Material

Electrical System A1-F18A	.C-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger IJnit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	WRM-000
Protective Boot Installation For Environmental Type Connectors With Metal Cable Clamps	WP080 00
Repair of Multi-Conductor Shielded Cable	WP030 00
Repair of Single Conductor Non-Shielded Cable	WP026 00
Repair of Single Conductor Shielded Cable	WP028 00
Wire Type List	WP004 00

Alphabetical Index

Subject	Page No.
Adding Identification Markers, Figure 13	18
Adding Identification Marker to Replacement Wire, Figure 2	5
Adding Identification Marker to Replacement Wire, Figure 5	9
Adding Non-Shielded Wire to Braided Wiring Harness	5
Adding Shielded Wire to Braided Wiring Harness	9
Adding Shielded Wire to Braided Wiring Harness Non-Shielded Wire	18
Completing Braided Wiring Harness Repair	23
Completing Braided Wiring Harness Repair, Figure 19	23
Conductor Splices, Table 2	5
Crimping Wire, Figure 17	21
Crimping Wire, Figure 3	7
Crimping Wire Conductors, Figure 8	13
End Caps, Table 3	6
External Wire Replacement, Table 1	4
Install End Cap, Figure 18	22
Installing Crimp Barrel, Figure 16	20
Installing End Cap and Insulation Sleeve, Figure 9	14
Installing End Cap on Damaged Wire, Figure 4	8
Installing Solder Sleeves, Figure 11	16
Installing Tubular Shield Braid, Figure 10	15
Introduction	2
Materials Required	2
Support Equipment Required	2
M83519/1 and NAS1745 Solder Sleeve, Table 5	12
Placement of Repair Parts, Figure 7	11

Change 2 – 1 March 2001

Alphabetical Index (Continued)

Subject	Page No
Plastic Tiedown Straps, Table 4	8
Procedure	3
Replacement of Wire, Figure 2A	6
Shrink Insulation Sleeve, Figure 12	17
Shrinking Insulation Sleeve, Figure 15	
Splicing Damaged Wire, Figure 1	3
Strip Replacement Wire and Existing Wire, Figure 6	10
Stripping Wire, Figure 14	19

Record of Applicable Technical Directives

None

1. INTRODUCTION.

2. This work package provides general procedures for the repair of braided wiring harnesses by adding nonshielded or shielded wire external to the braided wiring harness.

Support Equipment Required

Part Number or Type Designation	Nomenclature
3308AS100	Repair Set-Wire and Connector
HT-900	Heat Tool
1317AS100-1	Nitrogen Servicing
	Unit-NAN-3

Materials Required

Specification or Part Number	Nomenclature
B637-1-500 YELLOW	Marker, Band
D-436-XX 1 XX	Conductor Splices
	(See Table 2)
D-609-XX 1 XX	Conductor Splice

Materials Required (Continued)

Specification or Part Number	Nomenclature
MIL-I-23594, TYPE 2, 1/2IN.WIDE	Insulation Tape
MIL-I-46852 TYPE 2, 1.000IN.BLK	Insulation Tape
MIL-T-43435 TYPE-2SIZE-3 FINISH-C	Lacing Tape
M23054/4-XXX-0	Insulation Sleeve
NAS1745-XX	Solder Sleeve
RNF100 1-8BLACK	Insulation Sleeve
See Table 3	End Caps
See Table 4	Plastic Tiedown Strap
8660 (3/16-Inch)	Tubular Shield Braid
8661 (5/16-Inch)	Tubular Shield Braid
8664 (5/32-Inch)	Tubular Shield Braid
8674 (1/16-Inch)	Tubular Shield Braid
	NOTE
Size required technician.	I to be determined by

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

a. Determine if wire to be replaced is damaged beyond repair by splicing. If splicing is possible, refer to WP026 00, WP028 00 or WP030 00, as applicable.

- b. Remove electrical connector protective boot. Refer to WP080 00. See figure 1.
- c. Remove at least 3 inches of harness cover beginning at cable clamp.
- d. Wrap end of cut harness cover with several turns of insulation tape (MIL-I-23594,TYPE 2, 1/2IN.WIDE).
- e. Cut damaged wire 1-1/2 inches from end of cut harness cover.

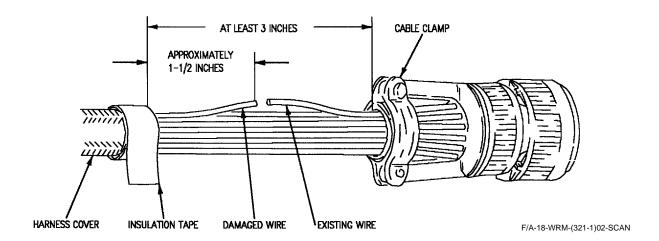


Figure 1. Splicing Damaged Wire

- f. Refer to table 1 for applicable external replacement wire and cut to required length.
- g. Refer to paragraph 4 for adding non-shielding wire to braided wiring harness, paragraph 5 for adding shielded wire to braided wiring harness or paragraph 6 for adding shielded wire to non-shielded wire.
- h. Replacement of coax wire must be directly connected to electrical connector. When replacing coax wire, refer to table 1 for necessary replacement wire then refer to Reference Designation To Work Package Index (WP001 02) for applicable connector repair work package.

Table 1. External Wire Replacement

·		
ORIGINAL WIRE TYPE	REPLACEMENT WIRE TYPE	
640	381	
	678	
	707	
641	381	
	678	
	707	
644	657	
645	658	
647	660	
650	664	
651	665	
652	666	
653	667	
656	656	
677	381	
	678	
678	678	
689	689	
705	705	
706	706	
707	707	
716	716	
726	843	
732	732	
761	381	
	678	
773	773	
774	774	

Table 1. External Wire Replacement (Continued)

ORIGINAL WIRE TYPE	REPLACEMENT WIRE TYPE
798	798
799	799
800	800
801	801
805	805
806	806
807	807
808	808
809	809
810	810
811	811
813	813
814	814
822	822
824	824
852	852
868	868
871	871

4. ADDING NON-SHIELDED WIRE TO BRAIDED WIRING HARNESS.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

a. Add identification markers to replacement wire at least 3 inches from both ends of wire. See figure 2.

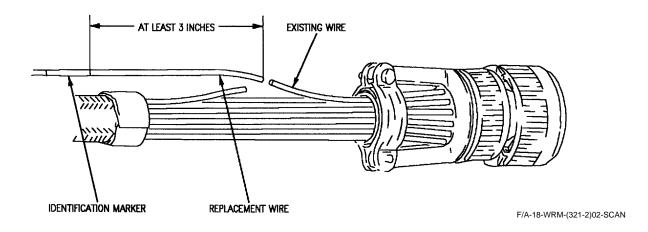


Figure 2. Adding Identification Marker to Replacement Wire

b. Based on wire size to be repaired, select applicable conductor splice part number from table 2.

Table 2. Conductor Splices

Part Number	Color Strip	Wire Sizes AWG	Maximum Wire Insulation Size (Inch)
D-436-36	Red	20, 22, 24	3/32
D-436-37	Blue	16, 18, 20	7/64
D-436-38	Yellow	12, 14, 16	3/16

Change 2 – 1 March 2001

c. Based on wire size of damaged wire, select applicable end cap part number from table 3.

Tabl	le 3.	End	Caps
------	-------	-----	------

PART N			MAXIMUM WIRE
CAGE 06090	CAGE 24011	COLOR	INSULATION SIZE (INCH)
TC 4001 CRN	SRC-1	WHITE	1/16
TC 4003 CRN	SRC-2	RED	1/8
TC 4005 CRN	SRC-3	SLATE	1/4

NOTE

Identify applicable cable/wiring assembly below in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070, then refer to Wire Type List (WP004 00) for correct wire strippers.

- d. Using wire strippers identified in WP004 00, replacement wire and existing wire as shown below. See figure 2A.
- e. Slide sealing sleeve over end of replacement wire and install crimp barrel on end of wire.

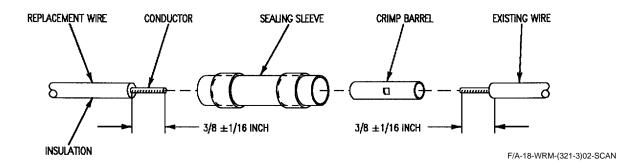


Figure 2A. Replacement of Wire

- f. Make sure replacement wire conductor is visible in center of crimp barrel and crimp wire using GMT 232 crimping tool supplied with wire and connector repair set.
- g. Make sure existing wire conductor is visible in center of crimp barrel and crimp wire using GMT 232 crimping tool. See figure 3.

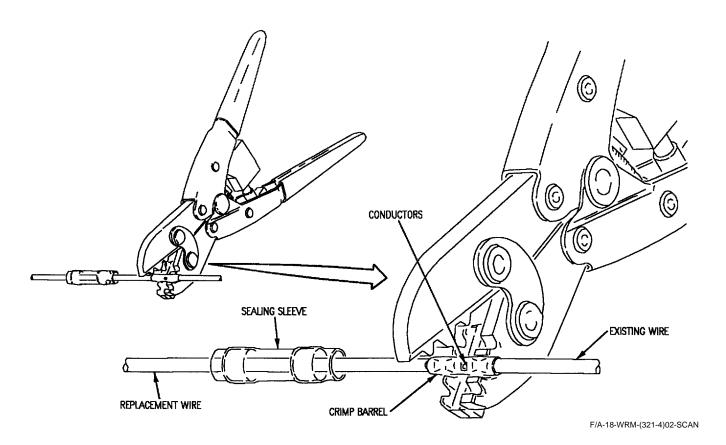


Figure 3. Crimping Wire

h. Install end cap on end of damaged wire.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheelwells, stand-up bays, or crew stations can result in asphyxiation.

- i. Center sealing sleeve over crimp barrel and using heat tool, apply heat starting at one end of sealing sleeve until melted insert flows from end of sleeve then move along sleeve until insert at opposite end of sleeve melts and flows along wire.
- j. Shrink end cap on end of damaged wire using heat tool. See figure 4.

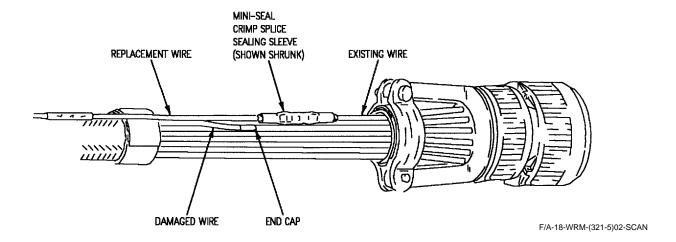


Figure 4. Installing End Cap on Damaged Wire

- k. Route replacement wire along outside of overbraided wiring harness and secure using lacing tape spot ties or plastic tiedown straps per table 4.
- 1. Repeat paragraphs 4b through 4j to open end of replacement wire then go to paragraph 7 to complete repair.

Table 4. Plastic Tiedown Straps

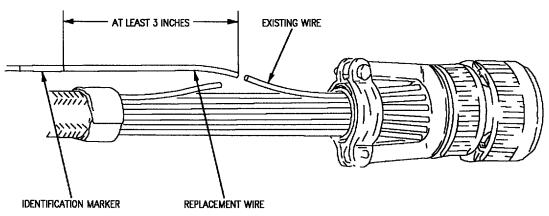
PART N	PART NUMBER		BRAIDED WIRING HARNESS DIAMETER (INCHES)	
CAGE 06383 CAGE 16956		MINIMUM	MAXIMUM	
PLT-2S-CP30	08402	1/16	1-3/4	
PLT-4H-C30	08403	3/16	3-1/2	
SST-2H-C30	-	3-16	2	

5. ADDING SHIELDED WIRE TO BRAIDED WIRING HARNESS.

a. Add identification markers to replace wire at least 3 inches from both ends of wire. See figure 5.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.



F/A-18-WRM-(321-2)02-SCAN

Figure 5. Adding Identification Marker to Replacement Wire

NOTE

Identify applicable cable/wiring assembly in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070, then refer to Wire Type List (WP004 00) for correct wire strippers.

b. Using wire strippers identified in strip replacement wire and existing wire as shown below. See figure 6.

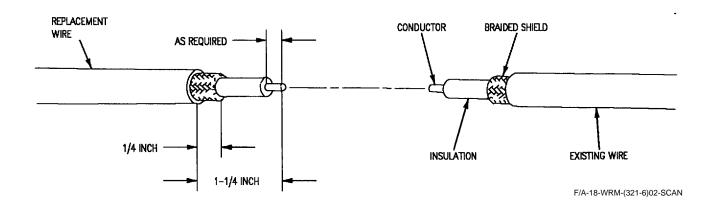


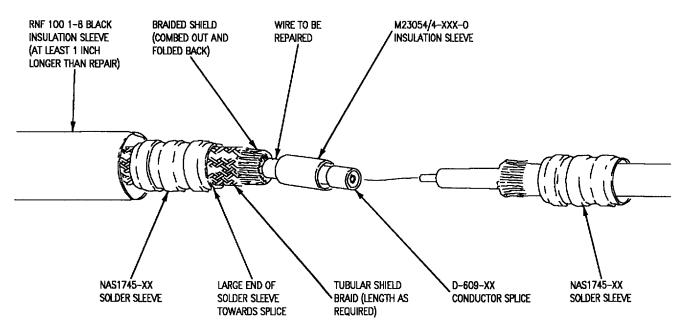
Figure 6. Strip Replacement Wire and Existing Wire

c. Comb out braided shield and fold back over wire jacket.

NOTE

Use Wire Type List (WP004 00) to determine size of materials required to complete the repair.

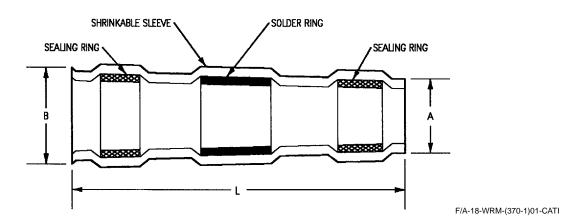
d. Slide insulation sleeve (RNF100-1-8 BLACK), tubular shield braid, solder sleeve, insulation sleeve (M23054/4-XXX-0) and conductor splice over end of replacement wire (see table 5). See figure 7.



F/A-18-WRM-(321-7)02-SCAN

Figure 7. Placement of Repair Parts

Table 5. M83519/1 and NAS1745 Solder Sleeve



A Diameter Before B Diameter Before L Length **Part Number Shrinking Minimum Shrinking Minimum** (Inch) (Inch) (Inch) NAS1745-1 5/64 3/32 5/8 M83519/1-1 NAS1745-2 7/64 1/8 5/8 M83519/1-2 NAS1745-3 3/16 13/64 5/8 M83519/1-3 1/4 NAS1745-4 15/64 3/4 M83519/1-5 NAS1745-5 5/64 3/32 5/8 NAS1745-13 5/64 3/32 5/8 M83519/1-1 NAS1745-14 7/64 1/8 5/8 M83519/1-2 NAS1745-15 3/16 5/8 13/64 M83519/1-3 NAS1745-16 1/4 15/64 3/4 M83519/1-5 NAS1745-17 15/64 1/4 3/4 M83519/1-4 NAS1745-18 7/16 15/32 1-7/64 NAS1745-25 1-7/64 33/64 35/64

Color - Transparent blue.

Use HT-900 heat tool to shrink sleeve.

e. Insert replacement wire conductor and existing wire conductor into conductor splice and crimp using GMT 232 crimping tool. See figure 8.

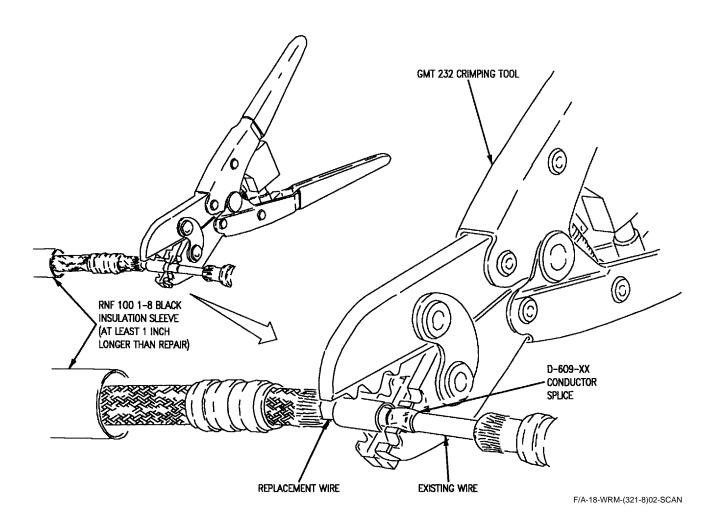


Figure 8. Crimping Wire Conductors

f. Based on wire size of damaged wire, select applicable end cap required from table 3 and install end cap on end of damaged wire.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

- g. Slide insulation sleeve (M23054/4-XXX-0) over crimped conductor splice and shrink insulation sleeve using heat tool.
- h. Shrink end cap on end of damaged wire using heat tool. See figure 9.

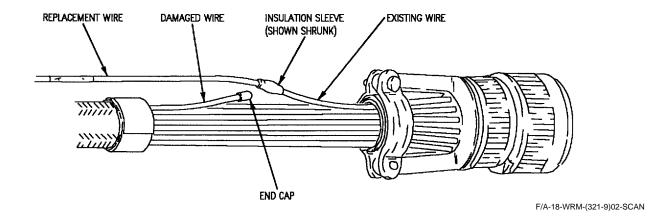


Figure 9. Installing End Cap and Insulation Sleeve

i. Slide tubular shield braid over completed splice repair. While holding tubular shield braid in place

comb out tubular shield braid and mesh strands with shield of wire being repaired. See figure 10.

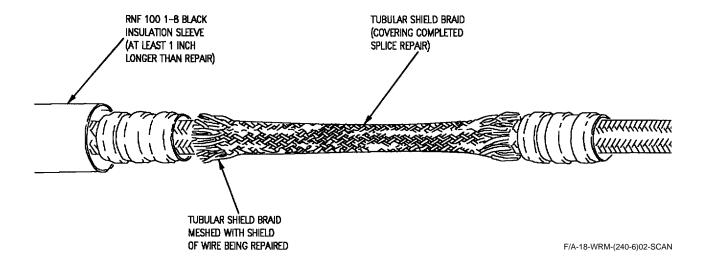


Figure 10. Installing Tubular Shield Braid

j. Slide solder sleeves over ends of tubular shield braid.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

k. Shrink solder sleeves using heat tool. See figure 11.

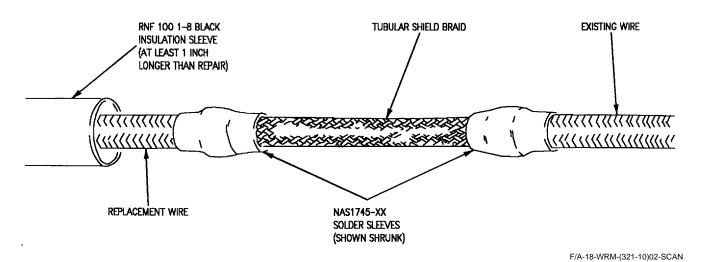


Figure 11. Installing Solder Sleeves

1. Slide insulation sleeve (RNF100 1-8BLACK) over splice repair. Insulation sleeve should extend at least 1/2-inch past ends of solder sleeves.

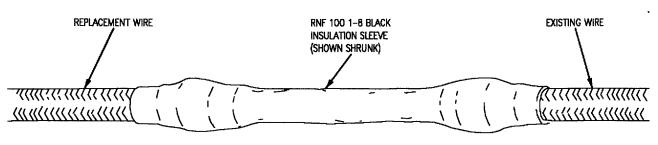
WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

WARNING

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

m. Shrink insulation sleeve (RNF100 1-8BLACK) using heat tool so that completed repair appears as below. See figure 12.



F/A-18-WRM-(321-11)02-SCAN

Figure 12. Shrink Insulation Sleeve

- n. Route replacement wire along outside of braided wiring harness and secure using lacing tape spot ties or plastic tiedown straps per table 4.
- o. Repeat paragraphs 5b through 5m to open end of replacement wire to complete repair.

6. ADDING SHIELDED WIRE TO BRAIDED WIRING HARNESS NON-SHIELDED WIRE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

a. Add identification markers to replacement wire at least 3 inches from both ends of wire. See figure 13

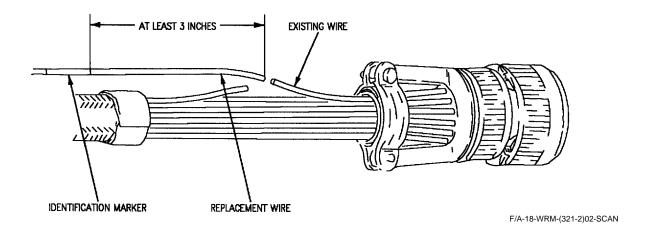


Figure 13. Adding Identification Markers

NOTE

Identify applicable cable/wiring assembly in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070, then refer to Wire Type List (WP004 00) for correct wire strippers.

b. Using wire strippers identified in WP004 00, strip replacement wire and existing wire as shown below. See figure 14.

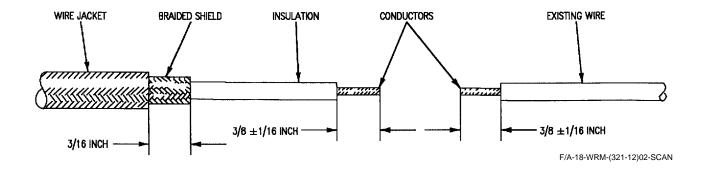


Figure 14. Stripping Wire

- c. Based on wire size to be repaired, select applicable mini-seal crimp splice part number from table 2.
- d. Based on wire size of damaged wire, select applicable end cap part number from table 3.

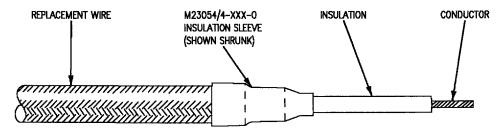
e. Cut required length of insulation sleeve (M23054/4-XXX-0) to cover braid shield on replacement wire.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

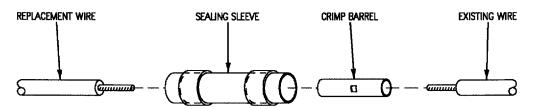
f. Slide insulation sleeve (M23054/4-XXX-0) over braid shield of replacement wire and shrink insulation sleeve using heat tool. See figure 15.



F/A-18-WRM-(321-13)02-SCAN

Figure 15. Shrinking Insulation Sleeve

g. Slide sealing sleeve over end of replacement wire and install crimp barrel on end of wire. See figure 16.



F/A-18-WRM-(321-14)02-SCAN

Figure 16. Installing Crimp Barrel

- h. Make sure replacement wire conductor is visible in center of crimp barrel and crimp wire using GMT 232 crimping tool supplied with wire and connector repair set.
- i. Make sure existing wire conductor is visible in center of crimp barrel and crimp wire using GMT 232 crimping tool. See figure 17.

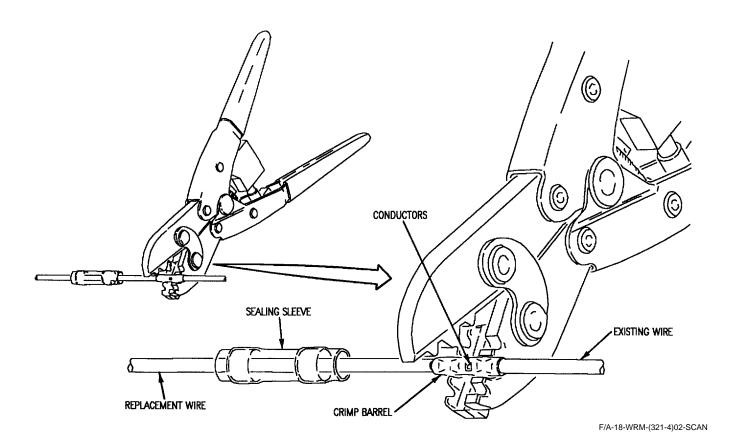


Figure 17. Crimping Wire

j. Install end cap on end of damaged wire.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

- k. Center sealing sleeve over crimp barrel and using heat tool, apply heat starting at one end of sealing sleeve until melted insert flows from end of sleeve then move along sleeve until insert at opposite end of sleeve melts and flows along wire.
- 1. Shrink end cap on end of damaged wire using heat tool. See figure 18.

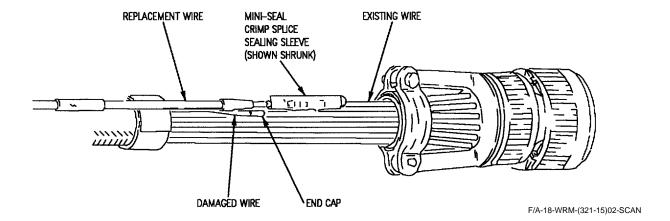


Figure 18. Install End Cap

- m. Route replacement wire along outside of braided wiring harness and secure using lacing tape spot ties or plastic tiedown straps per table 4.
- n. Repeat paragraphs 6b through 61 to open end of replacement wire then go to paragraph 7 to complete repair.

7. COMPLETING BRAIDED WIRING HARNESS REPAIR.

- a. Completely wrap exposed repair areas at both ends of replacement wire using insulation tape (MIL-I-46852,TYPE 2,1.000IN.BLK) with a 50 percent overlap.
- b. Secure insulation tape with a spot tie using lacing tape. See figure 19.

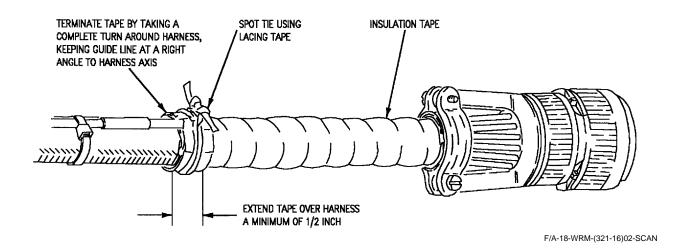


Figure 19. Completing Braided Wiring Harness Repair

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

FABRICATION OF SHIELDED WIRE HARNESS TERMINATED WITH ELECTROMAGNETIC

INTERFERENCE (EMI) BACKSHELLS

Reference Material

None

Alphabetical Index

Subject	Page No.
Adapter Tool Mating, Figure 2	3
Adapter/Backshell Removal, Figure 14	11
Barrier Tape Installation, Figure 26	19
CM Adapter Tool Part Numbering System, Figure 1	3
CM Adapter Tools	3
Connector Boot Termination	18
Description	2
Disassembly Procedure	8
Ferrule/Cable Clamp Installation, Figure 30	21
Ferrule/Cable Clamp Removal, Figure 10	9
Installation of Adapter Backshell, Figure 15	12
Insulation Tape Removal, Figure 11	10
Insulation Tape Removal, Figure 13	11
Jumper Wire Branch Laid Parallel and Spot Tied, Figure 25	19
Jumper Wire Branch Terminated With Wire Mesh Tape, Figure 24	18
Jumper Wire Positioning, Figure 19	14
Jumper Wires Grouped and Wire Mesh Tape Installed, Figure 23	18
Jumper Wires Positioned in Harness Assembly, Figure 22	17
Kapton Wire Setup, Figure 18	14
Loosening Position of Wrench, Figure 5	6
Materials Required	2
Plastic Tiedown Strap Removal, Figure 9	9
Plastic Tiedown Strap, Table 4	22
Procedure	3
Reassembly Procedure	12
Securing Ferrule/Cable Clamp, Figure 31	22
Securing Silicone Rubber Tape Boot, Figure 32	23
Securing Wire Mesh Tape Wrap, Figure 29	21
Shield Stripping and Removal Figure 17	13

Alphabetical Index (Continued)

Subject		
Shielded Wire Solder Sleeve, Table 1	15	
Silicone Rubber Tape Boot Removal, Figure 8	8	
Silicone Rubber Tape Buildup, Figure 27	20	
Silicone Rubber Tape, Table 3	19	
Solder Sleeve Positioning, Figure 20	15	
Solder Sleeve Shrunk In Correct Position, Figure 21	16	
Splice Area Termination	17	
Spot Tie Removal, Figure 7	8	
Strap Wrench	4	
Strap Wrench Setup and Adjustment, Figure 3	4	
Stripping Wire Insulation, Figure 16	13	
Support Equipment Required	2	
Tie Wrap Tool	7	
Tie Wrap Tool, Figure 6	7	
Tightening Position of Wrench, Figure 4	5	
Wire Mesh Tape Removal, Figure 12	10	
Wire Mesh Tape, Table 2	17	
Wire Mesh Tape Wrap, Figure 28	20	

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

None

1. **DESCRIPTION**.

Materials Required

2. This work package provides procedures for the repair of braided and nonbraided wire harnesses with electromagnetic interference (EMI) backshells.		Specification orPart Number	Nomenclature
Support Equipment Required		See Table 1 See Table 2 See Table 3	Silicone Rubber Tape Wire Mesh Tape Plastic Tiedown Strap
Part Number or Type Designation	Nomenclature	MIL-T-43435TYPE2- SIZE-3 FINISH-C	Tape, Lacing
3308AS100	Repair Set - Wire And	MIL-I-23594, TYPE 2.	Tape, Insulation

1/2IN.WIDE

Connector

3. PROCEDURE.

4. CM ADAPTER TOOLS.

a. CM adapter tool is shown in figure 1. Select tool part number to shell size from tool data in refer-

ence designation to backshell data index for specific cable clamp.

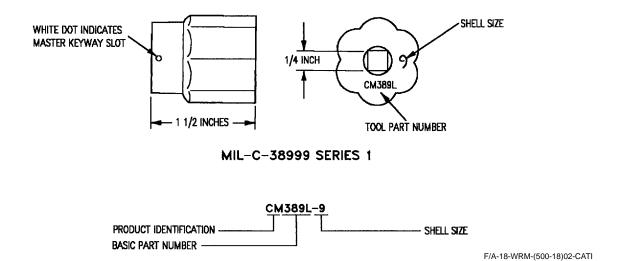
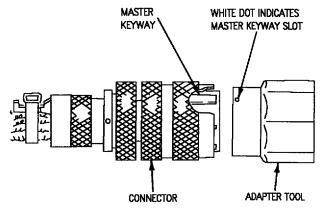


Figure 1. CM Adapter Tool Part Numbering System



White dot on adapter tool must be in line with master key of connector before insertion. Spinning the adapter tool onto connector until it slips into place causes unnecessary wear to tools, keys and keyways.

b. Mate adapter tool to connector. See figure 2.



F/A18-WRM-000-(501-1)01-SCAN 17

Figure 2. Adapter Tool Mating

5. STRAP WRENCH. NOTE

a. Install the strap around part to be tightened or loosened. Draw the strap tight and through the locking link so the cable clamp and strap rests on nose of wrench. See figure 3.

T-Handle can be used for additional gripping force to adapter if required.

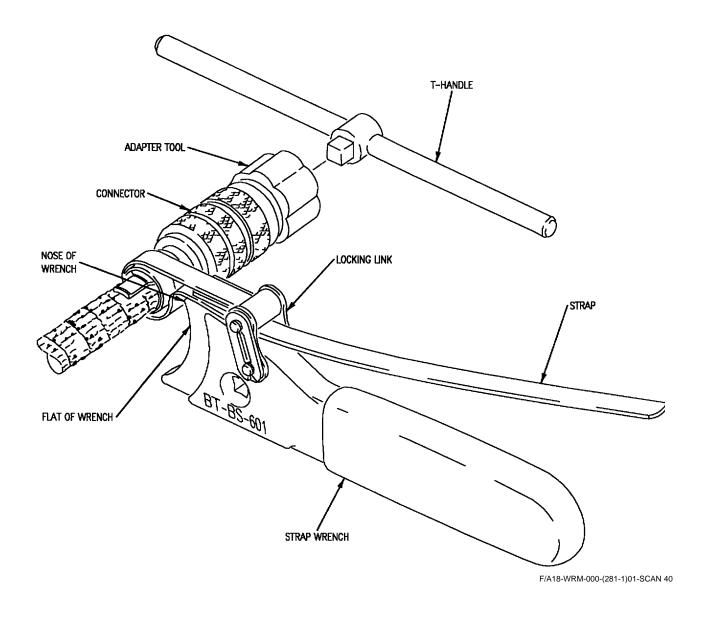


Figure 3. Strap Wrench Setup and Adjustment

b. To tighten clamp, apply force in a clockwise direction as viewed from the rear of the connector. The clamp and strap are tucked beneath the nose of the wrench and against the flat of the wrench. See figure 4.

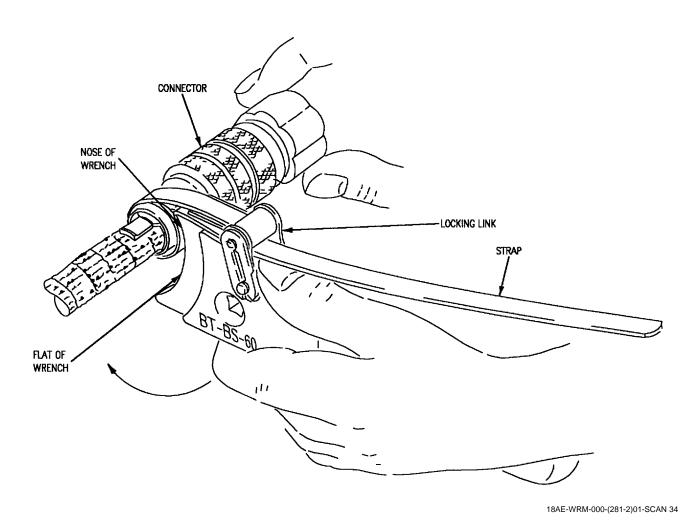


Figure 4. Tightening Position of Wrench

c. To loosen clamp, turn counterclockwise as viewed from the rear of the connector. See figure 5.

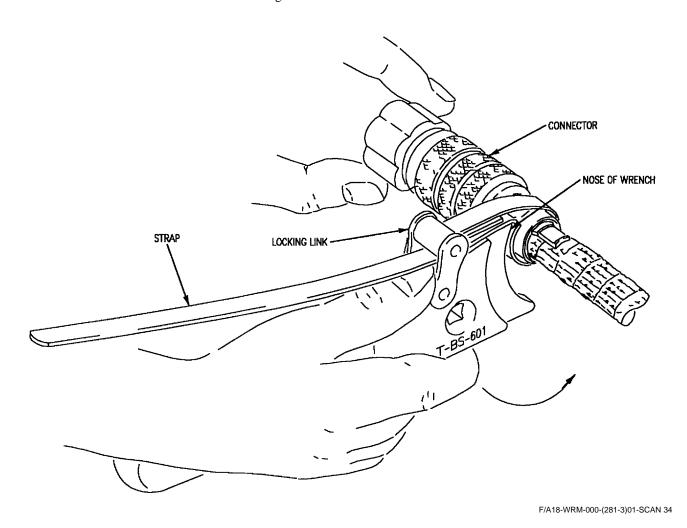
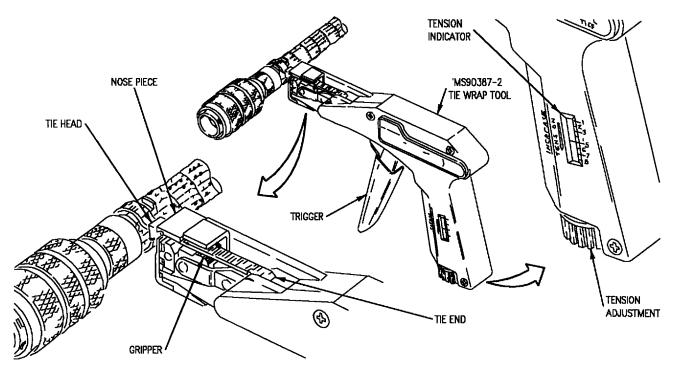


Figure 5. Loosening Position of Wrench

6. TIE WRAP TOOL.

- a. Adjust tool as specified in figure 6.
- b. Install cable tie around the cable/harness assembly.
- c. Thread tie end through slot in tie head a manually pull tight around harness assembly.
- d. Insert tie end through nose piece of tool and pull against tie head.

- e. Center cable tie in tool slot and over gripper.
- f. Squeeze trigger until cable tie is cut off flush with tie head.
- g. Release trigger and discard cut off end of cable tie.

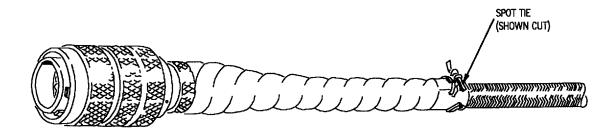


F/A18-WRM-000-(282-1)01-SCAN 28

Figure 6. Tie Wrap Tool

7. DISASSEMBLY PROCEDURE.

a. Remove spot tie from silicone rubber tape boot. See figure 7.



F/A18-WRM-000(283-1)01-SCAN 13

Figure 7. Spot Tie Removal



b. Unwrap or cut silicone rubber tape and remove from the boot area. See figure 8.

When cutting boot material with a sharp tool, extreme care must be taken not to nick or scrape the wire insulation beneath the cut.

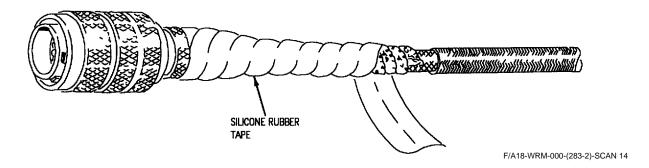
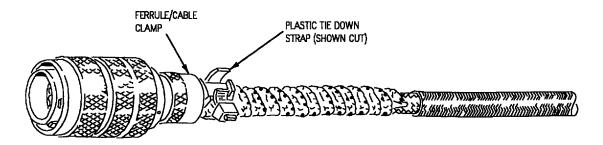


Figure 8. Silicone Rubber Tape Boot Removal

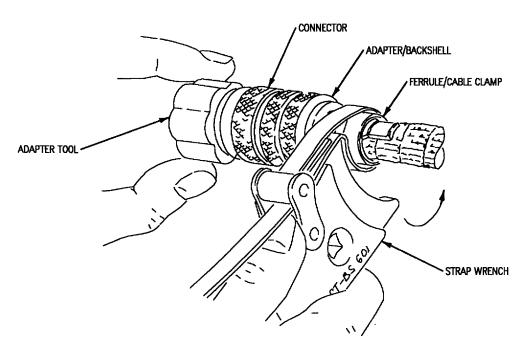
c. Cut and remove plastic tie down strap from ferrule/cable clamp. See figure 9.



F/A18-WRM-000-(283-3)01-SCAN 13

Figure 9. Plastic Tiedown Strap Removal

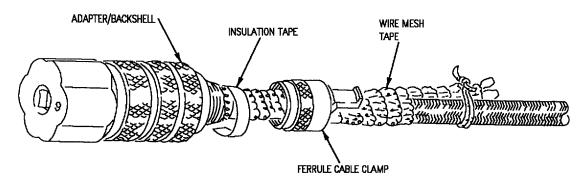
d. Remove ferrule/cable clamp from adapter/back-shell. See figure 10.



F/A18-WRM-000-(281-4)01-SCAN 24

Figure 10. Ferrule/Cable Clamp Removal

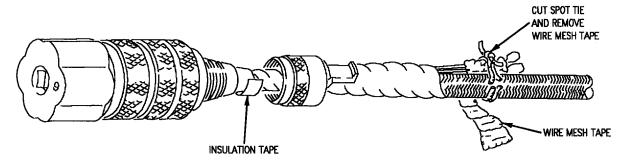
e. Remove insulation tape. See figure 11.



F/A-18-WRM-(1105-1)02-SCAN

Figure 11. Insulation Tape Removal

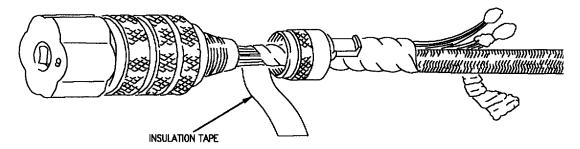
f. Unwrap wire mesh tape. See figure 12.



F/A-18-WRM-(1105-2)02-SCAN

Figure 12. Wire Mesh Tape Removal

g. Unwrap insulation tape. See figure 13.



F/A-18-WRM-(1105-3)02-SCAN

Figure 13. Insulation Tape Removal

h. Remove adapter/backshell. See figure 14.

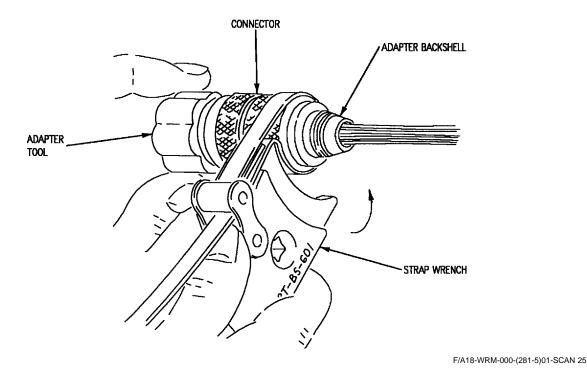


Figure 14. Adapter/Backshell Removal

8. REASSEMBLY PROCEDURE.

a. Slide adapter/backshell onto connector and tighten. See figure 15.

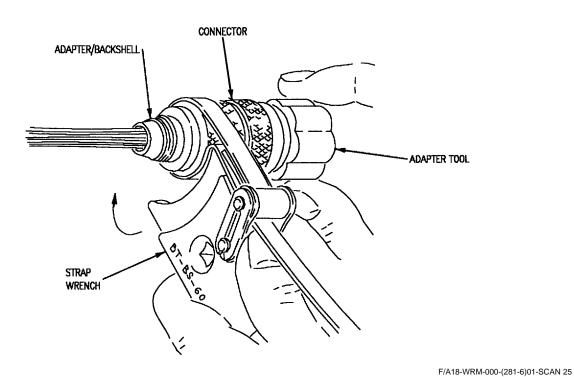
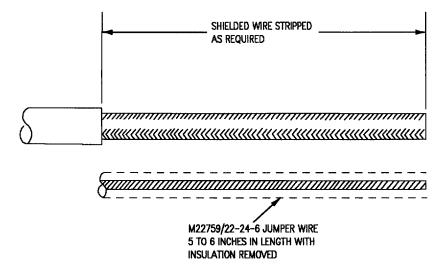


Figure 15. Installation of Adapter Backshell

9. WIRE PREPARATION.

a. Strip shielded and jumper wires as illustrated. See figure 16.

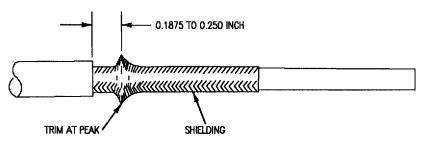


F/A-18-WRM-(1110-1)02-SCAN

Figure 16. Stripping Wire Insulation

b. Hold shielded wire on stripped area 1/4-inch from where the shield is exposed, between the thumb and forefinger of one hand while pushing the remain-

der of the shield toward it with the other hand. See figure 17.



F/A-18-WRM-(1110-2)02-SCAN

Figure 17. Shield Stripping and Removal

NOTE

Shield may be left forward on polyimide insulated wire. Solder sleeve must be put over cable before stripping if shield is not folded back for jumper wire installation.

c. Cut the formed bulge at the ridge to leave 3/16 to 1/4-inch of shield exposed. See figure 18.

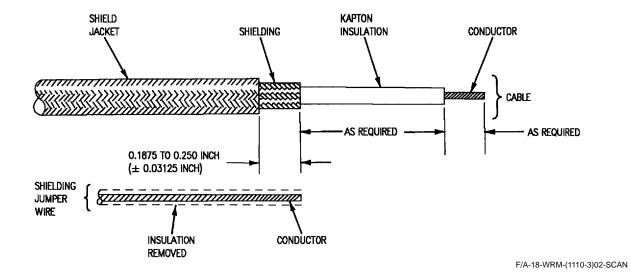
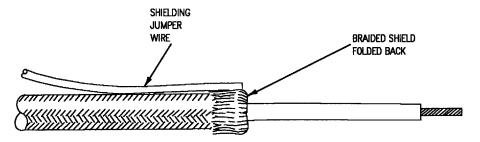


Figure 18. Kapton Wire Setup

d. For nonkapton insulated wire, fold shield back over shielded wire outer jacket. Position end of jumper wire against exposed shield. See figure 19.



F/A-18-WRM-(1110-4)02-SCAN

Figure 19. Jumper Wire Positioning

e. Slide the correct solder sleeve over the shield and jumper wire juncture, positioning the solder ring directly over the stripped areas. See Table 1 and figure 20.

PART NUMBER (INCH) (INCH) (INCH) D-108-00 5/8 3/32 5/64 D-108-01 5/8 1/8 7/64 3/16 D-108-02 5/8 13/64 D-108-03 3/4 5/16 9/32

Table 1. Shielded Wire Solder Sleeve

F/A-18-WRM-(1101-1)02-CATI

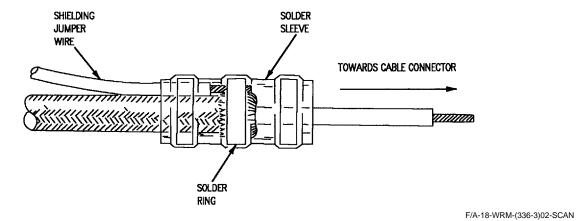


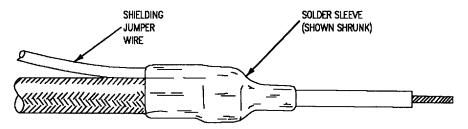
Figure 20. Solder Sleeve Positioning

WARNING

f. Shrink solder sleeve using the HT-900 heat tool with the nitrogen servicing unit. See figure 21.

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with the heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.



F/A-18-WRM-(336-4)02-SCAN

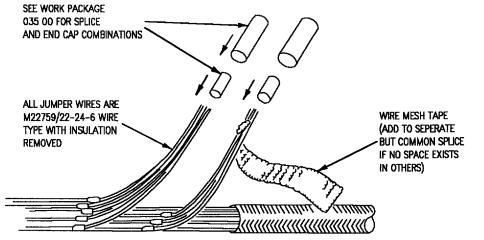
Figure 21. Solder Sleeve Shrunk in Correct Position

10. SPLICE AREA TERMINATION.

NOTE

Stagger splices to prevent splice area enlargement. Separate all splices, and if necessary, thermally isolate splices to prevent heat damage during shrinking process.

a. When 2 or more shielded wires are terminated in a cable assembly the jumper wires are terminated with stub splices and end caps. See figure 22.



F/A-18-WRM-(1110-5)02-SCAN

Figure 22. Jumper Wires Positioned in Harness Assembly

b. Splice the ends of uninsulated jumper wires together. Refer to WP035 00 for splicing procedures.

Table 2. Wire Mesh Tape

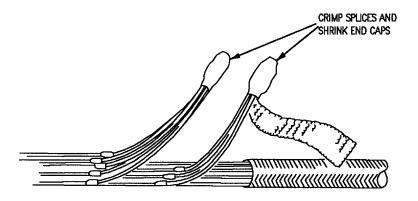
PART NUMBER	CAGE	WIDTH (INCH) NOMINAL	THICKNESS (INCH) NOMINAL	WIRE DIAMETER (INCH)
SC61298	0BKF2	1.000	1/64	17/128 (35 GAGE)

TAPE COMES IN ROLLS OUTSIDE DIAMETER 3 INCHES.

TEMPERATURE RANGE: -65° TO +300°F

c. Complete the shielded jumper wire terminations by splicing the ends together and adding a length of wire mesh tape. If insufficient room exists for adding the wire mesh tape, install an M22759122-24-6 jumper

wire with insulation removed to the last splice and create separate splice for wire mesh tape. See figure 23.

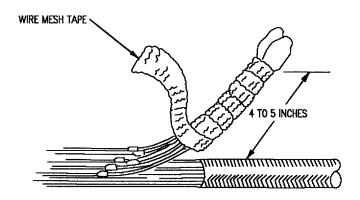


F/A-18-WRM-(1110-6)02-SCAN

Figure 23. Jumper Wires Grouped and Wire Mesh Tape Installed

11. CONNECTOR BOOT TERMINATION

a. Form the spliced jumper wires into a branch breakout and wrap it with the wire mesh tape. See figure 24.



F/A-18-WRM-(1110-7)02-SCAN

Figure 24. Jumper Wire Branch Terminated with Wire Mesh Tape

b. Lay the jumper wire branch back against the cable assembly and spot tie with lacing tape. See figure 25.

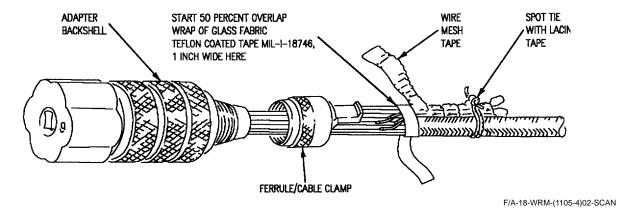
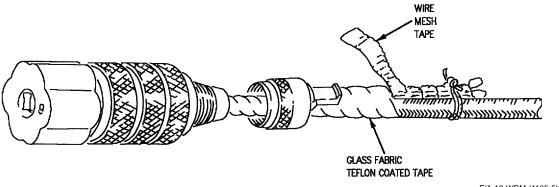


Figure 25. Jumper Wire Branch Laid Parallel and Spot Tied

c. Apply a barrier of teflon coated, adhesive tape MIL-I-23594 TYPE2, 1/2IN.WIDE, from the splice between the harness and the jumper wires to the EMI

backshell. Spiral wrap the tape, 50 percent overlap around the bundle. See figure 26.



F/A-18-WRM-(1105-5)02-SCAN

Figure 26. Barrier Tape Installation

Table 3. Silicone Rubber Tape

PART NUMBER	CAGE	WIDTH (INCH)
MIL-1-46852, TYPE 2, 1.000IN. BLK	81349	1.000

SELF - BONDING

TAPE COMES IN ROLLS

COLOR - BLACK

TEMPERATURE RANGE; -178° TO +500°F

d. Build up a tapered area of silicone rubber tape behind the adapter/backshell. See figure 27.

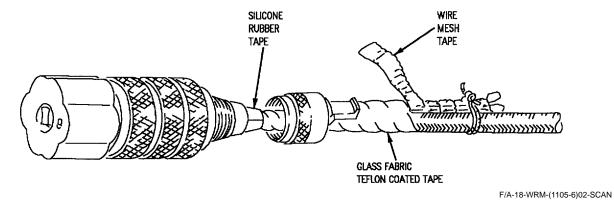


Figure 27. Silicone Rubber Tape Buildup

e. Wrap wire mesh tape with 50 percent overlap. See figure 28.

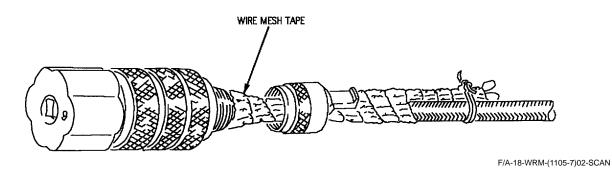
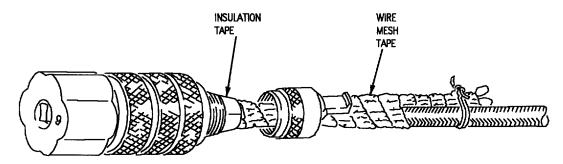


Figure 28. Wire Mesh Tape Wrap

f. Secure wire mesh tape wrap with insulation tape. See figure 29.



F/A-18-WRM-(1105-8)02-SCAN

Figure 29. Securing Wire Mesh Tape Wrap

g. Install ferrule/cable clamp and tighten with strap wrench. See figure 30.

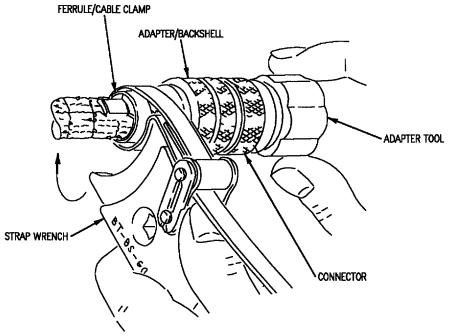
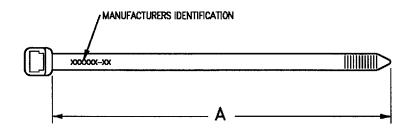


Figure 30. Ferrule/Cable Clamp Installation

F/A18-WRM-000-(281-7)01-SCAN 25

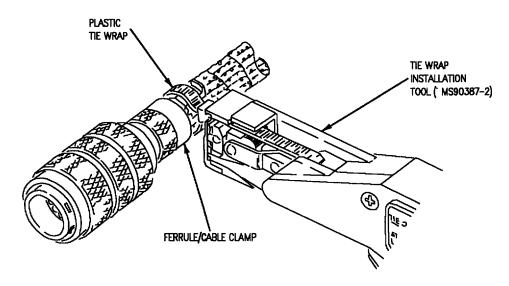
Table 4. Plastic Tiedown Strap



F/A-18-WRM-(510-1)01-CATI

PART NUMBER	LENGTH A (INCH)	CONNECTOR SHELL SIZE	MS90387-1 TOOL TENSION SETTING	MILITARY SPECIFICATION
PLT-2S-CP30 PLT4H-C30 SST-2H-C30	6-1/32 12.00 7-1/2	8 THRU 19 20 THRU 25 20 THRU 25	6 8 8	MIL-S-23190 MIL-S-23190 MIL-S-23190
TEMPERATURE RAN	NGE: -65° TO +300°F			

h. Install plastic tie wrap with tie wrap installation tool. See figure 31.

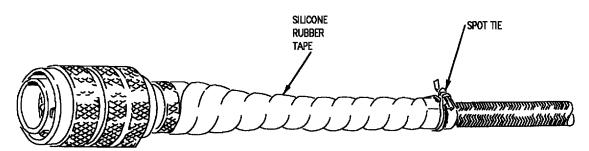


F/A18-WRM-000-(281-8)01-SCAN 21

Figure 31. Securing Ferrule/Cable Clamp

i. Wrap wire mesh tape with a 50 percent overlap of silicone rubber tape and secure the end with a spot

tie of MIL-T-43435 TYPE2SIZE-3FINISH-C lacing tape. See figure 32.



F/A18-WRM-00-(283-11)02-SCAN

Figure 32. Securing Silicone Rubber Tape Boot

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA SPLICE COMBINATIONS AND END CAPS

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Crimping Tools	WP013 00
Stripping Tools	WP010 00
Wire Type List	WP004 00

Alphabetical Index

Subject	Page No.
Description	1
Materials Required	
Procedure For Capping Unused Wires	
Procedure For Splicing	2
Splice Combinations and End Caps, Figure 1	4
Support Equipment Required	
Typical Splice Comparisons, Figure 2	5
Wire Combinations for D-609-() Splice and TAK () End Caps, Table 1	6
Wire Combinations for Splice and End Caps, Table 2	8

Record of Applicable Technical Directives

None

1. DESCRIPTION.

- 2. Parallel connectors listed in tables 1 and 2 are electrical crimp style tubular sleeves used to fabricate electrical splices. Electrical splices described in this work package are of two types, the stub and the lap splice (Butt splice).
- 3. The D-609-() (see table 1) is a seamless, tubular copper alloy, electrical crimp style parallel connector with a temperature range of -65° to $+350^{\circ}$ F.

4. The connectors listed in Table 2 are electrical crimp style parallel connectors made of copper alloy either tin or nickel plating, with a temperature range of -65° to $+350^{\circ}$ F (tin plated) and -65° to $+650^{\circ}$ F (nickel plated).

Support Equipment Required

Part Number or Type Designation	Nomenclature
3308AS100	Repair Set-Wire and Connector

Support Equipment Required (Continued)

Part Number or Type Designation Nomenclature

HT-900 Heat Tool

Specification

1317AS100-1 Nitrogen Servicing
Unit - NAN-3

Materials Required

or Part Number	Nomenclature
TC 400() CRN	End Cap, See Table 1
M23053/4-XXX-0	Sleeving
See Table 1	Parallel Connectors
See Table 2	Parallel Connectors
Tetraetch20ZBT	Etching Solution
CCC-C-440 TYPE 1,	Cheesecloth
CLASS 1	Commercial
MMS409	Cleaning Compound

5. **PROCEDURE FOR SPLICING.** See figure 1.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

NOTE

Splices must be staggered to limit enlargement of bundle, and provide constant diameter of splice area.

Twist stripped wire ends when necessary.

- a. Strip wire insulation 1/2 inch to permit insertion into splice (detail A).
- b. Insert wires in splice per table 1 and (detail A).

NOTE

Make sure wires extend through opposite end of splice.

- c. Center splice in crimping tool and crimp in place.
 - d. Trim all wires flush with splice (detail A).
- e. On stub splice, install correct end cap as shown on table 1, and (detail B).

NOTE

On single conductor 22 gage wire and smaller, modify a piece of M23053/4XXX-0 sleeving for build up of smaller wire before final covering of lap splice.

f. On lap splice, locate shrink sleeve over splice (detail B).

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with the heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

NOTE

After shrinking end caps/sleeve, inspect for punctures, and make sure caps/sleeve are completely sealed.

Using heat tool with nitrogen servicing unit, shrink end caps and sleeves in place (detail B).

h. For correct and incorrect crimping of splices, see figure 2.

6. PROCEDURE FOR CAPPING UNUSED WIRES. See figure 1, detail C.

a. Cut wire 1 inch from braid.

WARNING

Etching solution is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection required. Avoid repeated/prolonged contact. Use only in well ventilated areas. Keep away from open flames or other sources of ignition.

- b. Submerge wires in etching solution for 10 seconds.
- c. Rinse wires in running water for 5 to 10 seconds to neutralize etching solution.

WARNING

Cleaning compound is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection required. Avoid repeated/prolonged contact. Use only in well ventilated areas. Keep away from open flames or other sources of ignition.

d. Rinse wires a second time in cleaning compound for 5 to 10 seconds.

e. Dry wires with shop air or clean cheesecloth.

WARNING

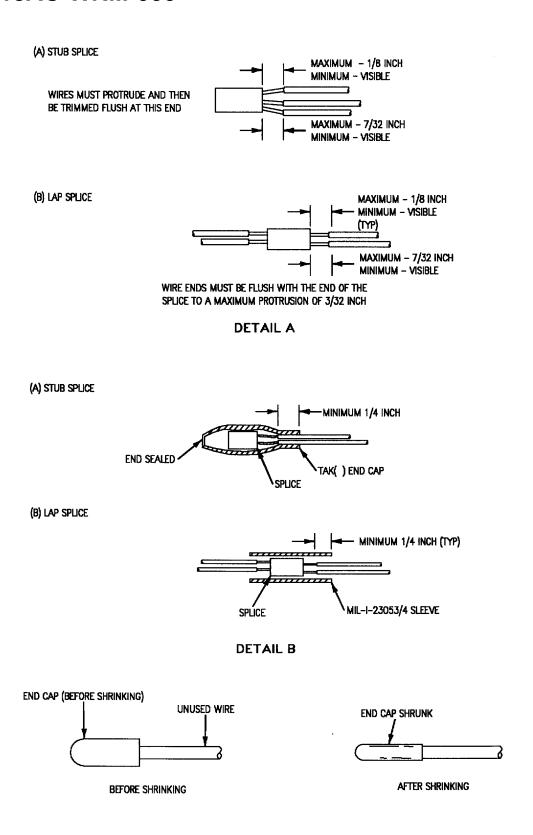
To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with the heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

NOTE

Color of insulation will be beige (light brown) to dark brown.

- f. Shrink end cap TC 400 () CRN (table 1) on wire using heat tool and nitrogen servicing unit.
 - g. Allow wire to cool.



DETAIL C

F/A-18-WRM-(808-1)02-CATI

Figure 1. Splice Combinations and End Caps

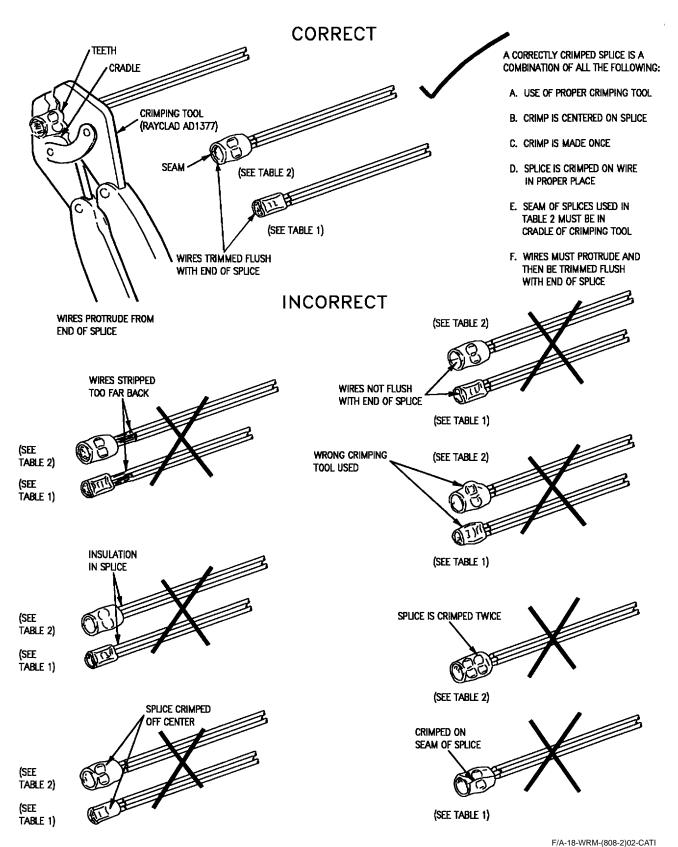


Figure 2. Typical Splice Comparisons

Table 1. Wire Combinations for D-609-() Splice and TAK () End Caps

WIRE COM	BINATION	PRI	MARY	
GAGE	QTY	SPLICE	END CAP	
18	2-3	D-609-05	TAK 3/16	
16	2	D-609-05	TAK 3/16	
16 20	1 3	D-609-05	TAK 3-16	
20	3-4	D-609-05	TAK 3/16	
16 20	1 2	D-609-05	TAK 3/16	
16 20	1-2 1	D-609-05	TAK 3/16	
20 22	1 5	D-609-05	TAK 3/16	
22	4-7	D-609-05	TAK 3/16	
20 22	1-3 3	D-609-05	TAK 3/16	
16 22	1-2 2	D-609-05	TAK 3/16	
20 22	2-3 1	D-609-05	TAK 3/16	
16 22	1-2 1	D-609-5	TAK 3/16	
18 22	1 1	D-609-5	TAK 3/16	
16 20 22	1 1 1	D-609-5	TAK 3/16	
22 24	1 4-8	D-609-5	TAK 3/16	
22 24	1-2 3-9	D-609-5	TAK 3/16	
22 24	2-5 1-4	D-609-5	TAK 3/16	
20 22 24	1-2 2 1	D-609-5	TAK 3/16	
20 24	2 1	D-609-5	TAK 3/16	
16 24	1 1	D-609-5	TAK 3/16	
22 26	1-2 3-4	D-609-5	TAK 3/16	

Table 1. Wire Combinations for D-609-() Splice and TAK () End Caps (Continued)

WIRE COMI	WIRE COMBINATION		PRIMARY		
GAGE	QTY	SPLICE	TAK 3/16		
20 26	2 2	D-609-5			
22 26	3-5 1	D-609-5	TAK 3/16		
22 24	1 1	D-609-3	TAK 1/8		
24	2	D-609-3	TAK 1/8		
24	3	D-609-3	TAK 1/8		
22 26	1 2	D-609-3	TAK 1/8		
26	2	D-609-3	TAK 1/8		
26	4	D-609-3	TAK 1/8		
20	2	D-609-04	TAK 3/16		
20 22	1 1	D-609-04	TAK 3/16		
22	2	D-609-04	TAK 3/16		
22	3	D-609-04	TAK 3/16		
24 22	2 1	D-609-04	TAK 3/16		
24 22	3		TAK 3/16		
24 22	4 1	D-609-04	TAK 3/16		
20 24	20 1		TAK 3/16		
24	4	D-609-04	TAK 3/16		
22 26	1 4	D-609-04	TAK 3/16		
20 26	1 3	D-609-04	TAK 3/16		
22 26	2 2	D-609-04	TAK 3/16		
24 26	3 1	D-609-04	TAK 3/16		
20 22 26	1 1 1	D-609-04	TAK 3/16		
22 24 26	1 1 1	D-609-04	TAK 3/16		

Table 1. Wire Combinations for D-609-() Splice and TAK () End Caps (Continued)

WIRE COM	WIRE COMBINATION		IARY
GAGE	QTY	SPLICE	END CAP
20 26	1 1	D-609-04	TAK 3/16
26	5-7	D-609-04	TAK 3/16
TEMPERAT	TEMPERATURE RANGE		-67° TO +347°F

Table 2. Wire Combinations for Splice and End Caps

SPLICE	SPLICE		PRIMARY ALTERNATE		PRIMARY		HEAT OR CRIMP
GAGE	QUANTITY	SPLICE	END CAP	SPLICE	SLEEVE	TOOL	
8	1	NONE	TC 400() CRN	NONE	NONE	HT-900	
10	1	NONE	TX 400() CRN	NONE	NONE	HT-900	
2 10	2	34319	6039-25-P	327041	MMS-819A	HT-900	
10	3	34319	6039-25-P	327041	MMS-819A	HT-900 69062	
12	1	NONE	TC 400() CRN	NONE	NONE	HT-900	
12	3	34318	D300-18	2-34318	MMS-819A	HT-900 69355	
14	1	NONE	TC 400() CRN	NONE	NONE	HT-900	
14	2	34138	D300-12	323754	MMS-819A	HT-900 49935	
1 14	3	34318	D300-18	2-34318-1	MMS-819A	HT-900 69355	
14	4	34318	D300-18	2-34318-1	MMS-819A	HT-900 69355	
16	1	NONE	TC 400() CRN	NONE	NONE	HT-900	
16	3	34318	D300-12	323754	MMS-819A	HT-900 49935	

Table 2. Wire Combinations for Splice and End Caps (Continued)

SPLICE	1	PRI	MARY	ALTE	RNATE	HEAT OR CRIMP
GAGE	QUANTITY	SPLICE	END CAP	SPLICE	SLEEVE	TOOL
16	4	34318	D300-12	323754	MMS-819A	HT-900 49935
1 16	5	34318	D300-18	2-34318-1	MMS-819A	HT-900 69355
16	6	34318	D300-18	2-34318-1	MMS-819A	HT-900 69355
16	7	34318	D300-18	2-34318-1	MMS-819A	HT-900 69355
16	9	34319	6039-25-P	327041	MMS-819A	HT-900 69062
16	10	34319	6039-25-P	327041	MMS-819A	HT-900 69062
20	1	NONE	TC 400() CRN	NONE	NONE	HT-900
20	5	34138	D300-12	323754	MMS-819A	HT-900 49935
20	6	34138	D300-12	323754	MMS-819A	HT-900 49935
20	7	34138	D300-12	323754	MMS-819A	HT-900 49935
20	8	34138	D300-12	323754	MMS-819A	HT-900 49935
20	9	34138	D300-12	323754	MMS-819A	HT-900 49935
20	10	34138	D300-12	323754	MMS-819A	HT-900 49935
20	11	34138	D300-12	323754	MMS-819A	HT-900 49935
20	13	34138	D300-18	2-34318-1	MMS-819A	HT-900 69355
20	14	34138	D300-18	2-3418-1	MMS-819A	HT-900 69455

Table 2. Wire Combinations for Splice and End Caps (Continued)

SPLICE		PRI	MARY	ALTERNATE		HEAT OR CRIMP
GAGE	QUANTITY	SPLICE	END CAP	SPLICE	SLEEVE	TOOL
22	1	NONE	TC 4001() CRN	NONE	NONE	HT-900
22	8	34138	D300-12	323754	MMS-819A	HT-900 49935
22	9	34138	D300-12	323754	MMS-819A	HT-900 49935
22	10	34138	D300-12	323754	MMS-819A	HT-900 49935
22	11	34138	D300-12	323754	MMS-819A	HT-900 49935
22	13	34138	D300-12	323754	MMS-819A	HT-900 49935
24	1	NONE	TC 400() CRN	NONE	NONE	HT-900
24	11	34138	D300-12	323754	MMS-819A	HT-900 49935
24	12	34138	D300-12	323754	MMS-819A	HT-900 49935
24	13	34138	D300-12	323754	MMS-819A	HT-900 49935
10 14	1 1	34318	D300- 18	2-34318-1	MMS-819A	HT-900 69355
10 12	1 2	34319	D300-19	6039-25-P	MMS-819A	HT-900 69062
12 3 16	1 2	34318	D300-18	2-34318-1	MMS-819A	HT-900 69355
16 8	1 2	34320	6039-37-P	327042	MMS-819A	HT-900 69062
16 12	1 2	34318	D300-18	2-34318-1	MMS-819A	HT-900 69355
20 22	1 1	34130	D300-12	323754	MMS-819A	HT-900 49935

Table 2. Wire Combinations for Splice and End Caps (Continued)

SPLICE		PRIM	MARY	ALTERNATE		HEAT OR CRIMP
GAGE	QUANTITY	SPLICE	END CAP	SPLICE	SLEEVE	TOOL
20 22	1 7	34138	D300-12	323754	MMS-819A	HT-900 49935
20 22	1 8	34138	D300-12	323754	MMS-819A	HT-900 49935
20 22	1 9	34318	D300-12	3237545-P	MMS-819A	HT-900 49935
20 22	1 10	34318	D300-12	323754	MMS-819A	HT-900 49935
20 24	1 10	34138	D300-12	323754	MMS-819A	HT-900 49935
20 22	1 11	34138	D300-12	323754	MMS-819A	HT-900 49935
20 24	1 11	34138	D300-12	323854	MMS-819A	HT-900 49935
22 16	1 2	34138	D300-12	32754	MMS-819A	HT-900 49935
22 20	1 10	34138	D300-12	323754	MMS-819A	HT-900 49935
22 24	1 10	34138	D300-12	323754	MMS-819A	HT-900 49935
22 24	1 11	34138	D300-12	323754	MMS-819A	HT-900 49935
24 20	1 10	34138	D300-12	323754	MMS-819A	HT-900 49935
26 16	1 4	34138	D300-12	323754	MMS-819A	HT-900 49935
2 8	2 2	35187	6039-37-P	327044	MMS-819A	HT-900 69062
8 16	2 2	34320	6039-37-P	327042	MMS-819A	HT-900 69062
12 16	2 2	34318	D300-18	2-34318-1	MMS-819A	HT-900 69355

Table 2. Wire Combinations for Splice and End Caps (Continued)

SPLICE		PRIM	MARY	ALTERNATE		HEAT OR CRIMP	
GAGE	QUANTITY	SPLICE	END CAP	SPLICE	SLEEVE	TOOL	
8 16	2 3	34320	6039-37-P	327042	MMS-819A	HT-900 69062	
8 16	2 4	34320	6039-37-P	327042	MMS-819A	HT-900 69062	
8 16	2 5	34320	6039-37-P	327042	MMS-819A	HT-900 69062	
8 16	2 6	34320	6039-37-P	327042	MMS-819A	HT-900 69062	
8 16	2 2	34320	6039-37-P	327044	MMS-819A	HT-900 69062	
16 26	2 3	34138	D300-12	323754	MMS-819A	HT-900 49935	
16 8	2 4	35187	6039-37-P	327044	MMS-819A	HT-900 69062	
8 10 16	1 1 5	34320	6039-37-P	327042	MMS-819A	HT-900 69062	
10 20 8	1 1 2	34320	6039-37-P	327042	MMS-819A	HT-900 69062	
12 16 8	1 2 3	35187	6039-37-P	327044	MMS-819A	HT-900 69062	
20 8 16	1 2 4	34320	6039-37-P	327042	MMS-819A	HT-900 69062	
TEMPERATU	RE RANGE:	−65° TO +350°F			-65° TO	+650°F	

DOUBLE BACK ONE WIRE.

ADD ONE FILLER WIRE.
DOUBLE BACK TWO 16 GAGE WIRES.

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA

INSTALLATION OF TERMINALS, RING TONGUE CRIMPED BARREL

Title	WP Number
Installation of Ground Terminals, Ring Tongue Crimped Barrel	036 01
Installation of Miscellaneous Terminals, Ring Tongue Crimped Barrel	036 02

1 October 1993 Page 1

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA

INSTALLATION OF GROUND TERMINALS, RING TONGUE CRIMPED BARREL

Reference Material

Electrical System	1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	F18AC-WRM-000
Wire Type List	WP004 00

Alphabetical Index

Subject	Page No.
Crimp Tool H20 Assembly and Use	7
Crimp Positioning, Figure 10	8
Crimp Tool Arrangement For Insulated Terminals	7
Crimp Tool Arrangement For Non-Insulated Terminals	9
Crimping Procedure - Insulated Terminals	8
Crimping Procedure - Non-Insulated Terminals	10
Crimping Terminal - Insulated, Figure 11	9
Crimping Terminal - Non-Insulated, Figure 16	11
Die Turret Adjustment, Figure 8	7
Die Turret Removal - Insulated	9
Die Turret Removal - Non-Insulated	12
Female Die Adjustment, Figure 13	10
Indentor Positioning, Figure 12	9
Insulated Terminal Wire Installation, Figure 9	8
Non - Insulated Crimp Positioning, Figure 15	11
Non - Insulated Terminal Wire Installation, Figure 14	10
Crimp Tool H20 General Description	6
Die Turrets, Figure 7	6
Crimp Tool M22520/5-01 Assembly and Use	4
Crimp Positioning, Figure 4	5
Crimping Procedure	5
Die Installation	4
Die Installation, Figure 3	4
Die Removal	5
Lower Die Removal, Figure 6	6
Upper Die Removal, Figure 5	5
Crimp Tool M22520/5-01 General Description	4

Page 2

Alphabetical Index (Continued)

Subject	Page No
Die Type, Figure 2	4
Introduction	
Materials Required	3
Support Equipment Required	3
Procedure	3
Ground Terminal Crimping Data, Table 1	13
Strip Dimension Figure 1	3

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F18 AFC 8	31 May 86	F/A-18 Changes to Power Lever Control Actuato Circuit (WUC 42400) (ECP MDA F/A-18-00041)	1 Sep 86	-
F18 AFC 27	-	Improvement of Leading Edge Flap Design (ECP MDA-F/A-18-00044)	1 Sep 86	-
F18 AFC 39	30 Jun 93	Addition of a Second Shoot Light Power Supply Connector (WUC 44314)	1 Mar 94	-
F18 AFC 48	-	Alternating Current Bus Isolation (ECP MDA-F/A-18-00121)	1 Dec 88	-
F18 AFC 49	-	Addition of Sealed Lead Acid Battery (ECP MDA-F/A-18-00074)	1 Sep 86	-
F18 AFC 52	21 Nov 86	Cockpit Avionics Cooling Fan Thermal Protector Change (ECP-MDA-F/A-18-0112)	1 Mar 87	-
F18 AFC 53	-	Elimination of Tanks 1 and 4 Sneak Circuit, Tank 4 Motive Flow Shutoff Valve, and Raised Inverted Baffle (ECP MDA-F/A-18-0005/C1)	1 Sep 86	-
F18 AFC 54	-	Incorporation of Video Recorder Set	1 Oct 93	-
F18 AFC 57	-	Improved Aircraft Monitor and Control (AMAC), Installation of	1 Oct 93	-
F18 AFC 74	-	Installation of Aircraft Wiring Provisions for Additional Weapons Capability	1 Dec 88	-
F18AFC 81	-	Secondary Power System, APU Surge Control Valve, Aircraft Wiring; Modification of (WUC 4241170)	1 Oct 93	-

Record of A	pplicable	Technical	Directives
-------------	-----------	------------------	-------------------

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F18 AFC 90	-	Automatic Battery Cutoff (ECP-MDA- F/A-18-00165R1)	15 Jan 90	-
F18 AFC 114	-	Laser Target Designator/Ranger (LTD/R), Incorporation of	1 Oct 93	-

1. INTRODUCTION.

2. This work package contains the information and procedures required for the installation of ring tongue crimped barrel terminals.

Support Equipment Required

Part Number or Type Designation

Nomenclature

3308AS100

Repair Set-Wire and Connector

Materials Required

Specification or Part Number

Nomenclature

See Table 1

Terminal Crimping Data

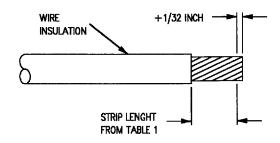
3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

a. Using table 1, locate the applicable reference designation (Ref Des) and Pin to identify the terminal, crimp tool, tool box location, die, wire strip length and, if applicable, use on code required to complete the necessary repair.

- b. Identify applicable cable/wiring assembly in volumes. A1-F18AC-WRM-010 through A1-F18AC-WRM-070 then refer to Wire Type List (WP004 00) for correct wire type and strippers.
- c. Strip wire to dimension specified in table 1. See figure 1.



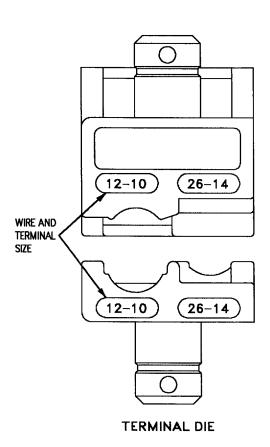
F/A-18-WRM-00-(28-1)01-CATI

Figure 1. Strip Dimension

d. After using table 1 to determine crimp tool and die required, go to paragraph 4 for use of the M22520/5-01 crimp tool or paragraph 9 for use of the H20 crimp tool.

4. CRIMP TOOL M22520/5-01 GENERAL DESCRIPTION.

a. This tool has a self-locking ratchet which prevents the tool from opening until the crimp is completed. This mechanism must never be disassembled since it guarantees correct crimping closure. The crimp tool has removable dies. See figure 2.



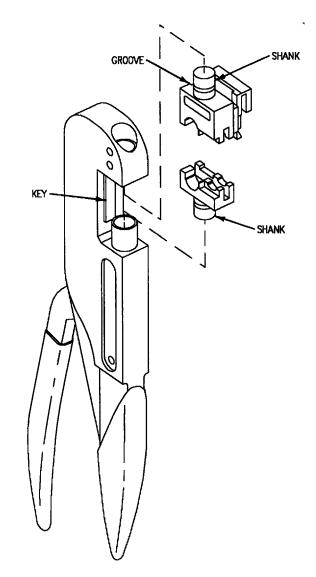
F/A-18-WRM-(26-1)01-CATI

Figure 2. Die Type

5. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

6. DIE INSTALLATION.

a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 3.



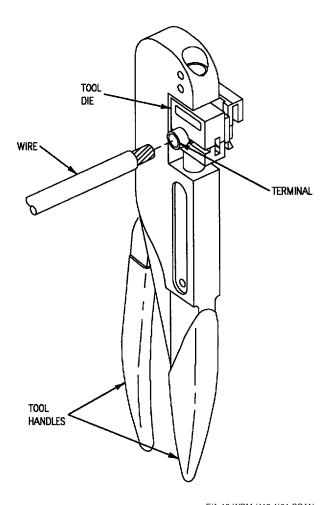
F/A-18-WRM-(27-1)01-CATI

Figure 3. Die Installation

b. Close handle to make sure dies are seated and locked in place.

7. CRIMPING PROCEDURE.

a. Squeeze tool handles slowly until tool die holds terminal firmly in place, but without denting the terminal. See figure 4.



F/A-18-WRM-(113-1)01-SCAN

Figure 4. Crimp Positioning

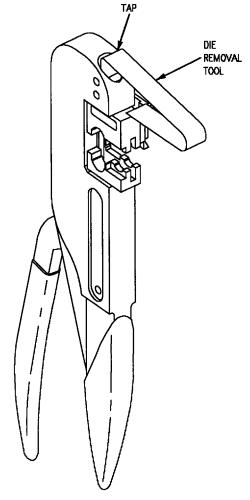
- b. Insert stripped wire into terminal barrel, making sure wire extends 1/32-inch past terminal barrel, until wire butts flush inside end of wire barrel.
 - c. Squeeze tool handles until ratchet releases.
- d. Open handles and remove terminal and wire assembly. Inspect crimp for cracked terminal barrel, crushed wire insulation, wire not inserted far enough or inserted too far. If crimp is bad, cut the terminal off and begin again.

8. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inch in diameter may be used.

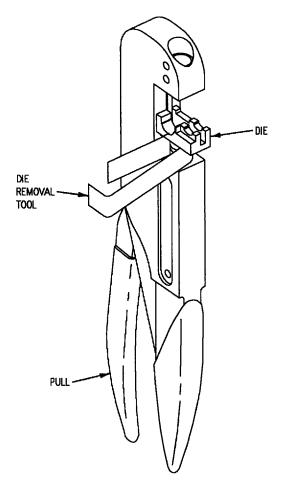
a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 5.



F/A-18-WRM-(29-1)01-CATI

Figure 5. Upper Die Removal

- b. The die releases from the lock spring and ejects 1/16-inch. Remove die by hand.
- c. Close crimping tool handle and slide the die removal tool between the die and tool body. See figure 6.



F/A-18-WRM-(30-1)01-CATI

Figure 6. Lower Die Removal

d. Pull handle open with a snap action. The die releases from the lock spring. Remove die by hand.

9. CRIMP TOOL H20 GENERAL DESCRIPTION.

a. This type of tool installs insulated or non-insulated terminals. By using two interchangeable female die turrets and adjusting the male die turret, the user may crimp terminals on 8 through 2 gage wire. See figure 7.

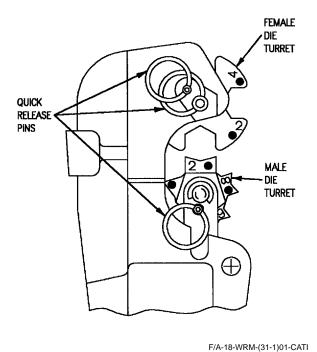


Figure 7. Die Turrets

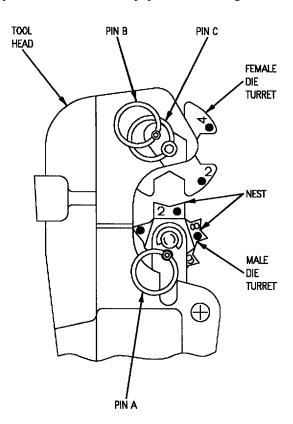
10. CRIMP TOOL H20 ASSEMBLY AND USE.

NOTE

Refer to paragraph 11 for insulated terminals or paragraph 14 for non-insulated terminals.

11. CRIMP TOOL ARRANGEMENT FOR INSULATED TERMINALS.

a. Remove pin A and rotate male die turret until required size nest is in up position. See figure 8.



F/A-18-WRM-00-(32-1)01-CATI

Figure 8. Die Turret Adjustment

- b. Install pin A to lock male die turret in position.
 - c. Remove pins B and C from tool head.

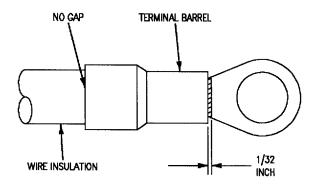


To ease installation of female die turret and prevent damage to the male die turret, make sure crimp tool handle is in the full open position.

- d. Slide female die turret (H20F) into tool head with wire size and color code on same side as the markings on the male die turret.
- e. Install pin C to hold female die turret in position.
- f. Rotate female die turret until wire size and color code match those set in male die turret.
- g. Install pin B through ring of pin C to lock the female die turret in position.

12. CRIMPING PROCEDURE- INSULATED TERMINALS.

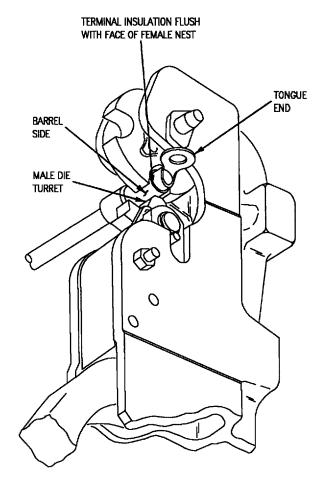
a. Insert stripped wire into terminal until wire insulation butts flush inside terminal barrel. See figure 9.



F/A-18-WRM-(38-1)01-CATI

Figure 9. Insulated Terminal Wire Installation

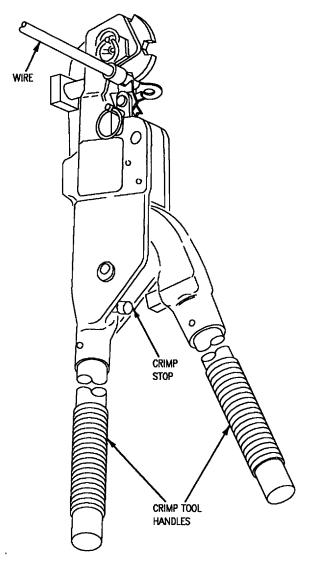
b. Position terminal so that terminal insulation on tongue end is flush with face of female nest and barrel side of terminal faces the male die turret. See figure 10.



F/A-18-WRM-(39-1)01-CATI

Figure 10. Crimp Positioning

c. Squeeze crimp tool handles until handle meets crimp stop. See figure 11.



F/A-18-WRM-(35-1)01-CATI

Figure 11. Crimping Terminal - Insulated

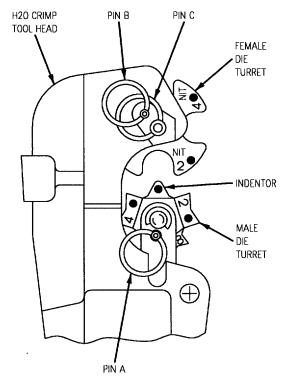
d. Open crimp tool handles and remove terminal and wire assembly. Inspect for correct crimp by examining for cracked terminal barrel, crushed wire insulation, wire not inserted far enough or inserted too far. If crimp is bad, cut the terminal off and begin again.

13. DIE TURRET REMOVAL - INSULATED.

- a. Remove pins B and C from tool head and remove female die turret. See figure 8.
 - b. Install pins B and C in tool head.

14. CRIMP TOOL ARRANGEMENT FOR NON-INSULATED TERMINALS.

a. Remove pin A and rotate male die turret until indentor with white spot is in up position. See figure 12.



F/A-18-WRM-(36-1)01-CATI

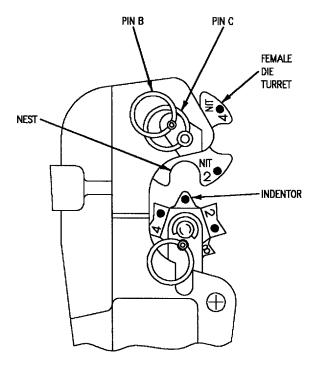
Figure 12. Indentor Positioning

- b. Install pin A to lock male die turret in position.
 - c. Remove pins B and C from tool head.



To ease installation of female die turret and prevent damage to the male die turret, make sure crimp tool handle is in the full open position.

- d. Slide female die turret (H20N) into tool head with wire size markings on same side as the markings on the male die turret.
- e. Install pin C to hold female die turret in position.
- f. Rotate female die turret until required nest size is in line with indentor. See figure 13.



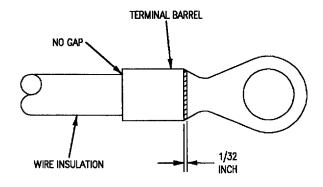
F/A-18-WRM-(36-2)02-CATI

Figure 13. Female Die Adjustment

g. Install pin B through ring of pin C to lock the female die turret in position.

15. CRIMPING PROCEDURE - NON-INSULATED TERMINALS.

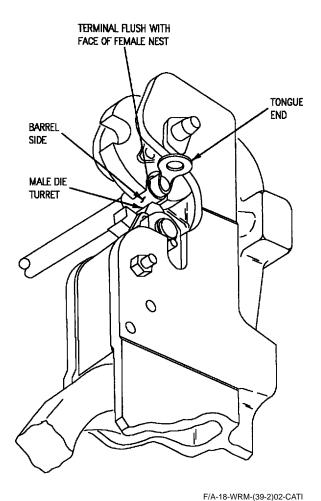
a. Insert stripped wire into terminal until wire insulation butts flush against terminal barrel. See figure 14.



F/A-18-WRM-(38-2)02-CATI

Figure 14. Non-Insulated Terminal Wire Installation

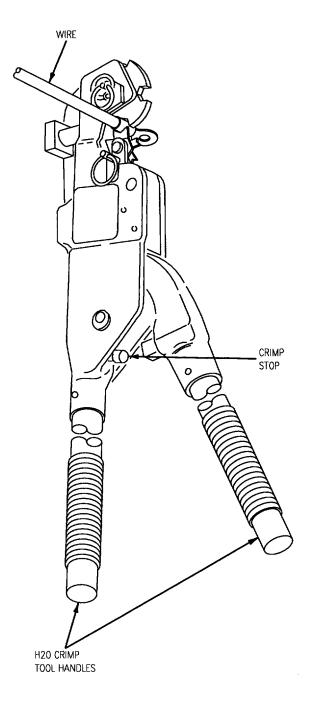
b. Position terminal so that end of terminal barrel at tongue end is flush with face of female nest and barrel side of terminal faces the male die turret. See figure 15.



aura 45 Nam Instituted Crime

Figure 15. Non-Insulated Crimp Positioning

c. Squeeze crimp tool handles until handle meets crimp stop. See figure 16.



F/A-18-WRM-(35-2)02-CATI

Figure 16. Crimping Terminal-Non-Insulated

d. Open crimp tool handles and remove terminal and wire assembly. Inspect crimp for cracked terminal barrel, crushed wire insulation, wire not inserted far enough or inserted too far. If crimp is bad, cut terminal off an begin again.

16. DIE TURRET REMOVAL - INSULATED.

- a. Remove pins B and C from tool head and remove female die turret. See figure 13.
 - b. Install pins B and C in tool head.

Table 1. Ground Terminal Crimping Data

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND1-A001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-A001	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AI
GND1-A005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-A006	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-A008	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-A009	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-B002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-C002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-C003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-C004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-C004	2	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	BCS
GND1-C005	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AH
GND1-C006	2	MS25036-116	H20	H20F (Red)	13/32 Inch	
GND1-E002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND1-E002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND1-E004	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-E004	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND1-E005	1	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AC
GND1-E005	1	M7928/1-42	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AD
GND1-E006	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-E007	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-E008	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-E102	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND1-F002	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND1-F003	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-F003	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND1-F004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND1-F005	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-H005	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-H006	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-J004	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-K101	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND1-K102	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFS
GND1-L001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND1-L101	1	MS25036-103	M22520/5-01	MS2252/5-100 Small Cavity	3/16 INCH	AA
GND1-M001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-M002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-M003	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-N001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AH
GND1-P001 GND1-P002	1 1	MS25036-121 MS25036-103	H20 M22520/5-01	H20F (Green) M22520/5-100 Small Cavity	17/32 Inch 3/16 Inch	DFJ
GND1-P002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-P003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-S001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-S002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-S003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-T001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-T002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND1-T003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-U001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-U001	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFJ
GND1-U001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAJ
GND1-U001	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAW
GND1-U002	1	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
GND1-U002	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	АН
GND1-U003	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-U003	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-U004	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-U004	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAW
GND1-V001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-V001	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND1-V002	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10B003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10B003	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND10C005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10C006	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10C006	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND10C006	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND10C007	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BM
GND10C007	2	M25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CAB
GND10C007	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BM
GND10E001	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND10E001	3	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	
GND10E005	1	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	AE
GND10E005	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND10E005	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10E005	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BF
GND10E006	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	СВ
GND10F001	1	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	
GND10F004	1	MS25036-108	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	AE
GND10F004	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND10F004	3	MS25036-108	M22520/5-01	M22520/5-100	3/16 Inch	AE
GND10F005	1	MS25036-108	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	AE
GND10F005	2	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	AE
GND10F005	3	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10F007	1	MS25036-108	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10F009	1	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10H002	1	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10H002	3	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10H003	1	MS25036-108	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10H003	2	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	AA
GND10H003	2	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	AE
GND10H007	1	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10H011	1	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10H011	2	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10H011	3	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	AL

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND10H013	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10H013	3	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	
GND10H014	1	MS25036-108	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
GND10H014	2	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	
GND10H014	3	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
GND10J002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10J002	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND10J003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10J003	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10J003	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10J003	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND10J008	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10J008	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10J009	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10J010	1	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	ВО
GND10J010	2	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	CAI
GND10J010	2	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	ВО
GND10K105	1	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	AA
GND10K106	1	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	AA
GND10K107	1	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	AA
GND10L001	1	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	AE
GND10L001	2	MS25036-108	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	BF
GND10L005	2	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	AA
GND10L006	1	MS25036-108	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	BE

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND10L106	1	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	AA
GND10L106	2	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	AA
GND10M001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10M002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10M002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10M004	1	M7928/1-65	M22520/5-01	M22520/5-100	3/16 Inch	
GND10M004	2	M7928/1-65	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10M005	1	M7928/1-65	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
GND10M005	2	M7928/1-65	M22520/5-01	M22520/5-100	3/16 Inch	
GND10N001	1	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10N001	2	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10N002	1	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10N002	3	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10N002	4	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10N003	1	M7928/1-65	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10P001	1	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10P001	2	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10P001	2	MS25036-108	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	DCR
GND10P001	3	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10P001	4	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10P002	1	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10P002	2	MS25036-103	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
GND10P002	3	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10P002	4	MS25036-103	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND10P004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10P004	2	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	
GND10P005	1	MS25036-103	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
GND10P005	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10P006	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10P006	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10P006	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10P006	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10P007	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10P008	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10P008	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10P008	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10P008	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10P009	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10P009	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10P009	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10P011	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND10P011	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND10P012	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10P012	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10P013	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CC
GND10P013	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CC
GND10P013	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CC
GND10P013	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CC

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND10R001	1	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	
GND10R001	2	MS25036-103	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
GND10R001	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10R001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10R002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10R002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10R003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10R003	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10R004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10R004	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10R005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND10R006	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND10R006	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND10R008	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10R010	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10R010	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10R010	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10R010	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10R011	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10R011	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10R011	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10R011	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10R012	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10R012	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND10R012	3	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	AA
GND10R012	4	MS25036-103	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	AA
GND10R013	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND10R015	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND10R015	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND10R015	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND10R015	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND10R016	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND10R016	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND10S001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CD
GND10S002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CE
GND10S002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CE
GND10S002	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10S002	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CF
GND10S003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CF
GND10S004	1	M7928/1-65	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	СВ
GND10S005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BN
GND10T001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10T002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10T002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10T003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CE
GND10T003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CE
GND10T003	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10T003	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CE

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND10T004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CG
GND10T005	1	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	CG
GND10T005	2	M7928/1-65	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	СВ
GND10T007	1	MS25036-103	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	BN
GND10U001	1	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10U001	4	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10U002	1	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10U003	2	MS25036-108	M22520/5-01	Small Cavity M22520/5-100	9/32 Inch	АН
GND10U003	3	MS25036-108	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	АН
GND10U003	3	MS25036-112	M22520/5-01	Small Cavity M22520/5-100	9/32 Inch	AI
GND10U004	1	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10U006	1	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
GND10U007	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10V001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10V001	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10V002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND10V003	1	MS25036-108	M22520/5-01	M22520/5-100	3/16 Inch	
GND10V003	2	MS25036-108	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND10V004	1	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND11C001	1	MS25036-108	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND11C001	2	MS25036-108	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
GND11C001	3	MS25036-103	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
GND11C001	4	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	CY
GND11C001	4	MS25036-108	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	AG

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND11C002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BR
GND11C003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AI
GND11E001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	ВТ
GND11E001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND11E001	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND11E001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND11E002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BE
GND11F001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND11F001	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND11F001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND11H001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND11H001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND11H001	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND11H001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND11H002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND11H002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND11L001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BF
GND11N001	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND11N001	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12A001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12A003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND12A003	3	MS25036-112	M22520/5-01	M22520/5-100 Small Cavity	9/32 Inch	AL
GND12B001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12B002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND12B002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AJ
GND12C001	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AK
GND12C001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BCS
GND12C001	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C001	4	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
GND12C002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BCS
GND12C002	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	ВСТ
GND12C002	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C002	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AU
GND12C003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C003	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C003	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C003	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C004	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C004	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C004	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C004	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFO
GND12C005	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFP
GND12C005	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFY
GND12C005	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AQ
GND12C005	3	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND12C005	4	MS25036-112	M22520/5-01	M22520/5-100	9/32 Inch	
GND12C006	1	MS25036-103	M22520/5-01	Large Cavity M22520/5-100 Small Cavity	3/16 Inch	BR
GND12C006	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BS
GND12C006	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C006	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C006	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C007	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C007	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C007	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12C007	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AM
GND12C007	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND12C008	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND12C008	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND12C008	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND12C008	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND12C009	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AI
GND12C009	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AI
GND12D001	1	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	СН
GND12D001	2	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
GND12D001	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/15 Inch	СН
GND12D001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	СН
GND12D002	1	MS25036-112	M22520/5-01	M22520/5-100 Small Cavity	9/32 Inch	
GND12E001	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12E001	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND12E001	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12E001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CI
GND12E001	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CJ
GND12E002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BE
GND12F002	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F002	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F002	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F002	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F003	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F003	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F003	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F004	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AK
GND12F004	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AJ
GND12F004	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F004	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F005	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F005	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F005	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F006	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F006	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F006	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND12F007	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F007	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F009	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F010	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F010	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12F010	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND12F010	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND12F010	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12H001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12H003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12H003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12J001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12J001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DEX
GND12J002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12J003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12J004	1	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BM
GND12J005	1	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BM
GND12K001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND12K002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND12K003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BE
GND12L002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND12L003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BF
GND12L004	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFW
GND12N001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND12N001	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12N001	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12N001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12N002	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12N002	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12N002	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12N002	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12N003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12N003	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12N003	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12N003	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12N004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12N004	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12N004	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12N004	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12W001	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12W001	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND12Y002	1	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AM
GND12Y002	1	MS25036-152	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	АТ
GND12Y002	2	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AM
GND12Y003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BM
GND12Y003	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BM
GND12Y005	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CK
GND12Y005	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CK

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND12Y006	1	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	CK
GND2-A005	1	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
GND2-A005	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BGL
GND2-A009	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-A010	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-A010	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-A010 GND2-A011	3	MS25036-115 M7928/1-15	H20 M22520/5-01	H20F (Red) M22520/5-100	13/32 Inch 3/16 Inch	BCS
	1			Small Cavity		
GND2-B001	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-B005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-B006	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-B007	1	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	AL
GND2-C002	1	MS25036-108	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
GND2-C002	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BU
GND2-C002	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	ВТ
GND2-C003	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-C005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	ВСТ
GND2-C005	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BCS
GND2-C005	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-C005	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFU
GND2-C005	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-C006	1	MS25036-157	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
GND2-C006	2	MS25036-157	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
GND2-C007	1	M7928/L-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-C008	1	MS25036-117	H20	H20F (Red)	13/32 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND2-C009	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BBP
GND2-C010	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BGL
GND2-D003	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-D003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-D003	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-D003	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BGL
GND2-D005 GND2-D006	1	MS25036-117 MS25036-103	H20 M22520/5-01	H20F (Red) M22520/5-100 Small Cavity	13/32 Inch 3/16 Inch	BDT
GND2-D006	2	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	ВСТ
GND2-D006	2	MS25036-157	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	BCS
GND2-D006	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	ВСТ
GND2-D008	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	ļ
GND2-D008	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BGL
GND2-D008	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BU
GND2-D009	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFX
GND2-D009	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFX
GND2-E002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-E003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-E004	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-E004	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DDF
GND2-E005	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-E006	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-E007	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CBN
GND2-E007	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CBL

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND2-F007	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-F008	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-F009	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-F009	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AR
GND2-F010	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-F013	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-F015	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-F015	2	M7928/l-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BE
GND2-F016	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-F016	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-F016	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-F017	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-F017	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-F018	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND2-F018	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-F020	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-F021	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CL
GND2-F021	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DGE
GND2-F022	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-F022	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-H001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-H002	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-H002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-H004	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND2-H006	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-H006	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BGL
GND2-H011	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-H011	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND2-H011	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND2-H011	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CN
GND2-H011	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DGF
GND2-H015	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AU
GND2-H015	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AV
GND2-H015	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-J003	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-J004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-J004	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DGF
GND2-J006	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-J006	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BCS
GND2-J008	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-J009	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-J010	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-J010	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND2-K002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	СО
GND2-K002	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-K003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND2-K102	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND2-K102	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BK

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND2-K102	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BJ
GND2-K102	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DGG
GND2-L004	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND2-L004	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND2-L004	3	M7928/L-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND2-L005	1	MS25036-112	M22520/5-01	M22520/5-100 Small Cavity	9/32 Inch	AA
GND2-L005	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND2-L006	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFQ
GND2-L101	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND2-L101	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DGG
GND2-L102	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND2-L103	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND2-L103	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CA
GND2-L104	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND2-L105	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND2-M001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND2-M001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-M001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND2-M002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BL
GND2-M002	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CAF
GND2-M003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-M004	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-N001	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-N001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND2-N002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-N002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-N003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-N003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-N003	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CZ
GND2-N003	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CZ
GND2-P001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-P001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P002	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P002	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P003	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P003	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P006	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P007	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P008	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-P009	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P009	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P009	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND2-P010	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P011	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P012	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-P013	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-R001	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-R004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R004	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R004	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R004	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R005	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R005	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R005	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R006	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R007	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R008	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-R008	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-R008	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-R008	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AU
GND2-R010	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R010	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R010	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R011	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND2-R012	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-R013	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R014	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R014	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R014	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-R014	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND2-S001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-S001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-S001	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-S001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-S002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CQ
GND2-S002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-S003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-S003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-S003	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-S004	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-S005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-S007	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AM
GND2-S008	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND2-T001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-T001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-T001	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-T001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-T002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND2-T003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-T003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-T004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AM
GND2-T005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND2-U002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-U002	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-U002	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CEA
GND2-U002	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAW
GND2-U004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAP
GND2-U004	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AI
GND2-U004	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-U004	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAW
GND2-U004	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAP
GND2-U006	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-U008	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-V002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-V002	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-V002	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CEA
GND2-V002	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAW
GND2-V003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AH
GND2-V003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAW
GND2-V003	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-V003	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAW
GND2-V003	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAP

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND2-V004	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-V004	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND2-V006	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-A001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-A002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-A004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AI
GND3-B004	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-B005	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-C002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BEV
GND3-C004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-C006	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-C006	2	M7928/I-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	ВСТ
GND3-C007	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-D003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BEL
GND3-D003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BEZ
GND3-D003	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CA
GND3-D003	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DGJ
GND3-D003	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-E001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-E002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-E101	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND3-F002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-F003	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-F004	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND3-F005	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-F005	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BCS
GND3-F006	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-F010	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND3-F010	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND3-F011	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND3-F012	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-F012	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-F012	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-F013	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-H003	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-H007	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-H007	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-H008	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-H008	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-H008	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-H016	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-H016	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-J001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-J004	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-J004	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND3-K001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND3-K101	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AX
GND3-K103	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND3-K104	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND3-K105	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFS
GND3-L001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND3-L001	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND3-L001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BF
GND3-L103	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND3-L103	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AY
GND3-L103	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND3-L103	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DDG
GND3-L104	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND3-M001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-N001	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-N001	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-N002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-N002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-N002	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-N003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-N003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P002	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P002	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND3-P003	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P004	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND3-P005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P005	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P006	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P006	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P006	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P006	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P007	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-P008	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-R002	1	MS250.36-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND3-R002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND3-R002	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND3-R002	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND3-R003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND3-R004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND3-R004	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND3-R004	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND3-R004	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND3-R005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND3-R006	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND3-R006	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND3-R007	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND3-R008	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-S001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AM
GND3-T001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-T002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-T002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-T003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AM
GND3-U001	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-U001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAW
GND3-U001	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAP
GND3-U008	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-U008	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-U008	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-V001	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-V001	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-V001	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAW
GND3-V001	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAP
GND3-V002	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-V002	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND3-V002	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-A001	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND4-B001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-B002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-B003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-C001	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND4-D001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BCT
GND4-D001	2	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	BCS
GND4-D004	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-D006	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-D007	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-F006	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-F006	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-F008	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-F010	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-F011	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-F011	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-F012	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-H005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-H006	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-H006	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-H006	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-H008	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-H009	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-H010	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-H010	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-H011	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-H018	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-H018	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-J006	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND4-J006	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-J007	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-J007	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-J009	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-J010	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-J013	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-J016	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-J016	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-J017	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-J017	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-J017	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFV
GND4-K101	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-K102	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-K103	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-K104	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-L003	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND4-L004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-L004	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND4-L004	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-L004	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-L004	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND4-L004	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-L004	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND4-L101	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND4-L102	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-L102	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-L103	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-L103	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-L104	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-L104	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-L104	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-L104	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-L105	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-L106	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND4-N001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-P001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CR
GND4-R001 GND4-R002	1 1	MS25036-121 MS25036-103	H20 M22520/5-01	H20F (Green) M22520/5-100 Small Cavity	1/2 Inch 3/16 Inch	BZ
GND4-R003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND4-R004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND4-U001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-U002	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-V001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-V001	2	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	DAW
GND4-V001	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AI
GND4-V001	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AH
GND4-V002	1	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	3/16 Inch	
GND4-V003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND4-V004	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND4-V004	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAW
GND5-B001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND5-E001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND5-F002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND5-J001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND5-L102	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND5-P001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND5-R001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND6-K001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND6-K002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND6-K004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BE
GND6-L001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND6-L003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND7-A001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND7-C001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-C001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-C001	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DBB
GND7-C001	3	MS250:36-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
GND7-C001	4	MS250:36-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AU
GND7-C002	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-C002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-C002	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-C002	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND7-C003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AQ
GND7-C003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BW
GND7-C003	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFW
GND7-C003	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-C003	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DA
GND7-C003	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DB
GND7-C003	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-C004	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-C004	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BB
GND7-C004	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	ВС
GND7-C004	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AM
GND7-C004	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND7-C004	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AI
GND7-C004	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AH
GND7-C005	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND7-C005	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND7-C005	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND7-C006	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND7-C006	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND7-C006	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND7-C006	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND7-C007	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-C007	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND7-C008	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AI

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND7-C008	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AI
GND7-E001	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-E001	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-E001	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-E001	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-E002	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-E002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND7-E002	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND7-E002	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-E002	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-F001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CBU
GND7-F001	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AHI
GND7-F001	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-F001	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-F001	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-F002	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-F002	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-F002	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-F002	4	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	AE
GND7-F002	4	MS25036-108	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	AA
GND7-F003	1	MS25036-108	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
GND7-F003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-F003	3	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	AD
GND7-F003	4	MS25036-103	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND7-F004	1	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	
GND7-F004	2	MS25036-103	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	DFJ
GND7-F004	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAJ
GND7-F004	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-F004	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-H001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-H001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-H003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-H003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-J001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-J004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-J005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND7-J005	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND7-J005	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CS
GND7-L001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND7-N001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CT
GND7-N001	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-N001	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-N001	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND7-N002	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-N002	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-N002	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-N002	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND7-N002	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND8-H001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-H002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-H003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-H004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-H006	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-H007	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-H008	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-H008	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-H008	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-H009	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-H010	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-H010	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-H011	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-H012	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-J001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-J002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-J003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-J004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-J005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND8-K001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-A004	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-A004	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-A005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-A008	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND9-A008	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BGL
GND9-A009	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-A009	3	M7928/1-58	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	BCS
GND9-B001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-B002	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-B002	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-B003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-B003	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND9-B004	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-B004	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-B006	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-C006	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-C007	1	M7928/1-58	M22520/5-01	M22520/5-100 Small Cavity	9/32 Inch	
GND9-C007	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-C007	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-C007	4	M7928/1-58	M22520/5-01	M22520/5-100 Small Cavity	9/32 Inch	
GND9-C008	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-C008	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BGL
GND9-C009	2	MS25036-157	M22520/5-01	M22520/5-100 Small Cavity	9/32 Inch	ВСТ
GND9-C011	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BEV
GND9-C011	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BGL
GND9-C011	3	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
GND9-C011	4	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
GND9-C012	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND9-C013	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DGK
GND9-C014	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BM
GND9-C014	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BM
GND9-C014	2	MS25037-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CAB
GND9-D003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-D003	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAW
GND9-D003	2	M7928/1-58	M22520/5-01	M22520/5-100 Small Cavity	9/32 Inch	AK
GND9-D003	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-D003	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-D009	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-D011	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BGL
GND9-D011	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DGL
GND9-D011	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BGL
GND9-D013	1	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
GND9-D013	2	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	ВСТ
GND9-D013	3	M7928/1-58	M22520/5-01	M22520/5-100 Small Cavity	9/32 Inch	
GND9-D013	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	ВСТ
GND9-D016	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-D016	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-E001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-E002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AM
GND9-E002	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DDF
GND9-E007	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-E007	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND9-E008	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-E011	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-E011	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-E011	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-E012	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-E013	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CBN
GND9-F004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F004	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F014	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F014	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CBC
GND9-F015	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F015	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F015	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F017	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F018	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F018	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F018	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F019	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F020	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F020	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F021	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F022	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F022	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CBC
GND9-F022	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND9-F022	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F029	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F030	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F030	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F033	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F033	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F034	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F034	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F036	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F036	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BE
GND9-F036	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BF
GND9-F037	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F038	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F038	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F041	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-F042	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-F042	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CBM
GND9-H001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-H001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-H004	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-H005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-H005	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-H006	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-H009	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND9-H009	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-H009	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-H009	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-H009	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-H011	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-H011	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-H012	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-H012	1	M7928/ 1 - 15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-H012	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-J004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-J004	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND9-J005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-J006	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-J007	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-J015	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-J015	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-J015	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-J015	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-J017	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-J017	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-J017	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND9-J019	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	ВО
GND9-J019	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	ВО
GND9-J019	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DGN

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND9-J028	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-K001	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-K001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	СО
GND9-K002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-K101	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-K101	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-K101	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-K102	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-K103	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-K104	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-K104	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-K106	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-K106	2	M79928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CU
GND9-K106	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CA
GND9-K106	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFS
GND9-L004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BE
GND9-L004	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CA
GND9-L004	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-L010	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-L010	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-L010	3	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-L011	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-L011	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-L012	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFQ

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND9-L013	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DFQ
GND9-L101	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-L101	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-L102	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-L103	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-L104	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-M001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CAT
GND9-M001	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CAO
GND9-M001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CAF
GND9-M002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CAF
GND9-M002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CAF
GND9-M003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CAT
GND9-M003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
GND9-M003	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CAF
GND9-M003	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-M004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BL
GND9-M005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-M005	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-M005	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BM
GND9-M006	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DGM
GND9-M006	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-M007	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-M007	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-M007	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BM

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND9-M008	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BL
GND9-M009	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-M010	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-M011	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CAI
GND9-M011	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CAI
GND9-N001	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AH
GND9-N002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-N002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-N002	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-N003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND9-N003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND9-N004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-N004	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CZ
GND9-N004	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CZ
GND9-N004	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CZ
GND9-N006	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CW
GND9-P001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-P001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-P002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-P002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-P002	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-P003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND9-P004	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-P005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND9-P009	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-P012	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-P013	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND9-P013	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND9-P013	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND9-P013	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND9-P014	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND9-P015	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-P015	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND9-P016	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-P017	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-P017	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-R001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-R001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-R002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-R005	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND9-R005	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND9-R008	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-R008	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CAL
GND9-R009	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-R009	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-R009	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-R009	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CAN
GND9-R012	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND9-R015	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BZ
GND9-S001	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-S001	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-S001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-S002	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-S003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-S003	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-S004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-S004	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-S005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
GND9-S006	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-S007	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CX
GND9-S008	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-S009	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-S010	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND9-T001	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-T003	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-T004	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-T005	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-T005	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-T006	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-T006	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-T007	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-T008	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND9-T009	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	CX
GND9-T010	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-T011	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-T013	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND9-U001	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND9-U001	1	MS25036-112	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AM
GND9-U001	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-U001	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
GND9-U002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-U003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-U003	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-U003	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-U003	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-U004	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-U004	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-U004	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAW
GND9-U004	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAP
GND9-U004	4	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAJ
GND9-U005	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-U006	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-U006	2	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AI
GND9-U006	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAJ
GND9-U007	1	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
GND9-U010	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND9-U012	1	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	
GND9-U012	2	MS25036-103	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
GND9-U013	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-U015	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-U015	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-V001	1	MS25036-108	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
GND9-V001	2	MS25036-108	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
GND9-V001	4	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAW
GND9-V001	4	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DAP
GND9-V002	1	M7928/1-15	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-V002	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-V002	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-V003	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-V003	2	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-V003	3	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AI
GND9-V003	3	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AH
GND9-V004	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-V007	1	MS25036-112	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
GND9-V008	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-V009	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-V012	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-V012	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-V013	1	MS25036-108	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-V015	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Ground Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
GND9-V015	2	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
GND9-Y002	1	MS25036-103	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

USE ON CODE(S)

AA F/A-18B.

AB F/A-18A 161353 THRU 161987.

AC 161925 AND UP.

AD 161353 THRU 161924.

AE F/A-18A.

AG F/A-18A 161520 THRU 161987, F/A-18B 161354 THRU 161947.

AH 161353 THRU 161987.

AI 162394 AND UP.

AJ 161360 AND UP.

AK 161353 THRU 161359.

AL 161702 AND UP.

AM 161353 THRU 161528.

AN F/A-18A 161353 THRU 161761, F/A-18B 161354 THRU 161746, 162402 AND UP.

AO F/A-18A 161925 AND UP, F/A-18B 161924 THRU 161947.

AP F/A-18A 161520 THRU 161528, 162394 AND UP, F/A-18B 162402 AND UP.

AQ 161702 THRU 161987.

AR 161353 THRU 161528, F/A-18A 612394 AND UP.

AT 161702 THRU 162444

Table 1. Ground Terminal Crimping Data (Continued)

ı	Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
AU	161924 ANI	O UP.					,
AV	161353 THR	RU 16176	51.				
AX	F/A-18B 16	1354 THI	RU 161947.				
AY	F/A-18A 16	1353 TH	RU 161528.				
AZ	F/A-18A, F/A-18B 161	1354 THI	RU 161947.				
BA	F/A-18B 162	2402 AN	D UP.				
ВВ	161353 THR	RU 16151	9, 162394 AND UP.				
ВС	161520 THR	RU 16198	37.				
BD	161360 THR	RU 16198	37.				
BE	F/A-18B 161	1704 AN	D UP.				
BF	F/A-18A 16	1702 AN	D UP.				
ВЈ	F/A-18B 161	1360 AN	D UP.				
BK	F/A-18B 161	1354 THI	RU 161357.				
BL	161353 THR	RU 16151	9.				
BM	161520 ANI	O UP.					
BN	162415 ANI	O UP.					
ВО	161520 THR	RU 16241	4.				
BR	161353 THR	RU 16311	8.				
BS	F/A-18A 163 F/A-18B 163						
ВТ	161353 THRU 162909.						
BU	163092 AND UP.						
BV	F/A-18B 161924.						
BW	163119 ANI	O UP.					

Table 1. Ground Terminal Crimping Data (Continued)

R	ef Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
BX	F/A-18B 161	1354 THI	RU 161360.				•
BZ	F/A-18A, F/A	A-18B 16	61354 THRU 161947,	612836 AND UP.			
CA	F/A-18B 163	3104 AN	D UP.				
СВ	161353 THR	RU 16152	8.				
CC	162445 ANI	O UP.					
CD	161353 THR	RU 16152	1.				
CE	161353 THR	RU 16171	9.				
CF	F/A-18A 161 F/A-18B 161						
CG	161353 THR	RU 16172	7.				
СН	161353 THR	RU 16135	9.				
CI	F/A-18B 161	1354 THI	RU 161746.				
CJ	F/A-18A, F/A	A-18B 16	51924 AND UP.				
CK	161730 THR	RU 16192	4.				
CL	F/A-18A 161	1520 THI	RU 161761.				
СМ	F/A-18A 16	1925 AN	D UP.				
CN	161360 ANI	O UP.					
СО	F/A-18A 163	3092 AN	D UP.				
СР	F/A-18A, F/A-18B 161	1704 THI	RU 161947.				
CQ	F/A-18A 163 F/A-18B.	1353 THI	RU 161521,				
CR	F/A-18A 163 F/A-18B.	1353 THI	RU 163144,				
CS	162394 THR	RU 16311	8.				
СТ	161728 ANI	O UP.					

Table 1. Ground Terminal Crimping Data (Continued)

Re	ef Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
CU	F/A-18B 161	1354 THI	RU 162885.				
CV	F/A-18A 161	1353 TH	RU 161519.				
CW	162394 THR	RU 16241	7.				
CX	161353 THR	RU 16241	4.				
CY	F/A-18A 161	1353 TH	RU 161519, 162394 A	ND UP.			
CZ	F/A-18A 161 F/A-18B 161		D UP; RU 161947, 162836 A	ND UP.			
DA	161353 THR F/A-18A 161						
DB	F/A-18B 162	2402 THI	RU 163115; 163119 A	ND UP.			
AHI	161353 THR	RU 16135	69 AFTER F18 AFC 8.				
BBP	161353 THR	RU 16198	7 BEFORE F18 AFC	86.			
BCS	161702 ANI	O UP; AL	SO 161353 THRU 16	1528 AFTER F18 AF0	C 49.		
ВСТ	161353 THR	RU 16152	8 BEFORE F18 AFC	49.			
BEL	F/A-18A 161	1353 TH	RU 161987 BEFORE I	F18 AFC 48.			
BEV	161353 THR	RU 16198	37 BEFORE F18 AFC	48.			
BEZ	F/A-18B 161	1354 THI	RU 161947 BEFORE I	F18 AFC 48.			
BGL	162394 ANI	O UP; AL	SO 161353 THRU 16	1987 AFTER F18 AF0	C 48.		
CAB	F/A-18A 161 F/A-18B 161		RU 161519, RU 161360 AFTER F1	8 AFC 27.			
CAF	161353 THR	RU 16151	9 BEFORE F18 AFC	27.			
CAO	F/A-18A 16	1353 TH	RU 161519 BEFORE I	F18 AFC 27.			
CAT	F/A-18B 161	1354 THI	RU 161360 BEFORE I	F18 AFC 27.			
СВС			D UP; ALSO RU 161519 AFTER FI	8 AFC 27.			
CBL			D UP; ALSO RU 161746 AFTER F1	8 AFC 39.			

Table 1. Ground Terminal Crimping Data (Continued)

R	ef Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
СВМ			D UP; ALSO RU 161519 AFTER F1	18 AFC 39.			
CBN	F/A-18B 161704 AND UP; ALSO F/A-18B 161354 THRU 161360 AFTER F18 AFC 39.						
CBU	161360 ANI	O UP; AL	SO 161353 THRU 16	1359 AFTER F18 AF0	C 8.		
CDH	F/A-18A 16 F/A-18B 16 ALSO 1613	1704 AN		AFC 49.			
CEA	161925 ANI	O UP; AL	SO 161353 THRU 16	1924 AFTER F18 AF0	C 57.		
CAI	161520 ANI	O UP; AL	SO 161353 THRU 161	1519 AFTER F18 AFC	227.		
CAL	161353 THE	RU 16176	51 AFTER F18 AFC 53	3.			
CAN	161924 ANI	O UP; AL	SO 161353 THRU 16	1761 AFTER F18 AF0	C 53.		
DAJ	161353 THE	RU 16198	7 AFTER F18 AFC 74	4.			
DAP	161353 THE	RU 16198	7 BEFORE F18 AFC	74.			
DAW	162394 ANI	O UP; AL	SO 161353 THRU 16	1987 AFTER F18 AF0	C 74.		
DBB	161353 THE	RU 16152	8 AFTER F18 AFC 49	9.			
DCF	BEFORE F1	8 AFC 8	1.				
DCS	AFTER F18	AFC 81.					
DDF	F/A-18B 16	1354 THI	RU 161360 AFTER F1	18 AFC 54.			
DDG	F/A-18A 16	1353 THI	RU 161528 AFTER F1	18 AFC 54.			
DEX	162826 ANI	O UP AF	ΓER F18 AFC 114				
DFJ	162394 ANI	O UP; AL	SO 161353 THRU 16	1987 BEFORE F18 Al	FC 74.		
DFO	F/A-18B 162	2402 AN	D UP; ALSO 161353	THRU 161761 BEFOR	RE F18 AFC 74.		
DFP		1948 AN	.7, D UP; ALSO 51 AFTER F18 AFC 74	4.			
DGJ	163092 ANI	O UP; AL	SO 161353 THRU 16	1987 BEFORE F18 A	FC 48.		

Table 1. Ground Terminal Crimping Data (Continued)

R	ef Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
DGM	161520 ANI F/A-18A 16		.SO RU 161519 BEFORE I	F18 AFC 27.		•	
DFS	F/A-18B 161704 AND UP, ALSO F/A-18B 161354 THRU 161360 AFTER F18 AFC 54.						
DFQ			D UP; ALSO RU 161528 AFTER F1	8 AFC 54.			
DFU			28, 162394 AND UP; <i>A</i> 37 AFTER F18 AFC 48				
DFV	161702 ANI	O UP, AL	SO 161353 THRU 16	1528 AFTER F18 AFC	2 54.		
DFW	161353 THR	RU 16152	8 AFTER F18 AFC 54	1.			
DFX	163119 ANI	O UP; AL	SO 161353 THRU 16	3118 AFTER F18 AFC	C 90.		
DFY			RU 161528, 162394 A D UP; ALSO 161353	ND UP, IHRU 161519 AFTER	F18 AFC 54.		
DGE			D UP, ALSO RU 161519 AFTER F1	.8 AFC 39.			
DGF	161924 ANI 161353 THR	,	SO 51 AFTER F18 AFC 52	2.			
DGG			D UP; ALSO RU 161924 AFTER F1	8 AFC 52.			
DGK	161360 ANI	O UP; AL	SO 161353 THRU 16	1359 AFTER F18 AF0	C 53.		
DGL	161360 THR	RU 16198	7 BEFORE F18 AFC	48.			
PGN	162415 ANI	O UP; AL	SO 161353 THRU 16	1519 AFTER F18 AFC	C 27.		

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

INSTALLATION OF MISCELLANEOUS TERMINALS, RING TONGUE CRIMPED BARREL

Reference Material

Electrical System	A1-F18AC-420-30)()
Utility Battery and Charger Unit or Utility Battery	WP019 (00
Emergency Battery and Charger Unit or Emergency Battery	WP020 (00
Wiring Repair With Parts Data, General Wiring Repair Procedures	1-F18AC-WRM-00	00
Wire Type List	WP004 (00

Alphabetical Index

Subject	Page No.
Crimp Tool H20 Assembly and Use	6
Crimp Positioning, Figure 10	7
Crimp Tool Arrangement For Insulated Terminals	6
Crimp Tool Arrangement For Non-Insulated Terminals	8
Crimping Procedure - Insulated Terminals	7
Crimping Procedure - Non-Insulated Terminals	9
Crimping Terminal - Insulated, Figure 11	8
Crimping Terminal - Non-Insulated, Figure 16	10
Die Turret Adjustment, Figure 8	6
Die Turret Removal - Insulated	8
Die Turret Removal - Non-Insulated	11
Female Die Adjustment, Figure 13	9
Indentor Positioning, Figure 12	8
Insulated Terminal Wire Installation, Figure 9	7
Non-Insulated Crimp Positioning, Figure 15	10
Non-Insulated Terminal Wire Installation, Figure 14	9
Crimp Tool H20 General Description	6
Die Turrets, Figure 7	6
Crimp Tool M22520/5-01 Assembly and Use	4
Crimp Positioning, Figure 4	4
Crimping Procedure	4
Die Installation	4
Die Installation, Figure 3	4
Die Removal	5
Lower Die Removal, Figure 6	5
Upper Die Removal, Figure 5	5
Crimp Tool M22520/5-01 General Description	3
Die Type, Figure 2	3
Introduction	2

Alphabetical Index (Continued)

Subject	Page No.
Materials Required	2
Support Equipment Required	2
Procedure	3
Miscellaneous Terminal Crimping Data, Table 1\	12
Strip Dimension, Figure 1	3

Record of Applicable Technical Directives

Type/Number	Date	Title and ECP No.	Date Incorp.	Remarks
F18 AFC 19	-	Addition of a Second Shoot Light Power	1 Oct 93	-
F/A-18 AFC 39	-	Supply Connector (WUC 44314) No. 1 Fuel Tank Interconnect Valve, Replacement of; and Fuel Sequencing, Modification of	1 Oct 93	-
F/A-18 AFC 48	-	Alternating Current Bus Isolation (ECP	1 Oct 93	-
F/A-18 AFC 49	-	MDA-F/A-18-00121) Addition of Lead Acid Battery (ECP MDA-F/A-00074)	1 Sep 86	-
F/A-18 AFC 52	-	Cockpit Avionics Cooling Fan Thermal	1 Oct 93	-
F/A-18 AFC 90	-	Protector, Modification of GFE Battery Relay Control Unit, Incorporation of	1 Oct 93	-
F/A-18 AFC 93	-	Right Hand Primary A.C. Power Wires, Relocation of	1 Oct 93	-

1. INTRODUCTION

Materials Required

2. This work package contains the information and procedures required for the installation of ring tongue crimped barrel terminals.

Specification or Part Number

Nomenclature

See Table 1

Terminal Crimping Data

Support Equipment Required

Part Number or Type Designation

Nomenclature

DMC498-1001 Repair Set-Wire and

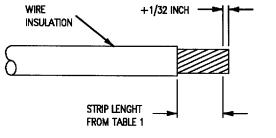
Connector

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- a. Using table 1, locate the applicable reference designation (Ref Des) and Pin to identify the terminal, crimp tool, die, wire strip length and, if applicable, use on code required to complete the necessary repair.
- b. Identify applicable cable/wiring assembly in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070 then refer to Wire Type List (WP004 00) for correct wire type and strippers.
- c. Strip wire to dimension specified in table 1. See figure 1.



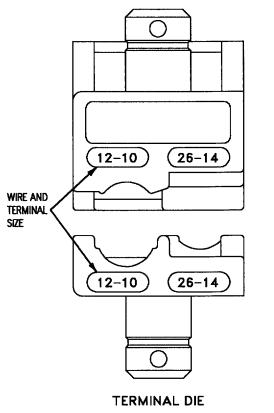
F/A-18-WRM-00-(28-1)01-CATI

Figure 1. Strip Dimension

d. After using table 1 to determine crimp tool and die required, go to paragraph 4 for use of the M22520/5-01 crimp tool or paragraph 9 for use of the H20 crimp tool.

4. CRIMP TOOL M22520/5-01 GENERAL DESCRIPTION.

a. This tool has a self-locking ratchet which prevents the tool from opening until the crimp is completed. This mechanism must never be disassembled since it guarantees correct crimping closure. The crimp tool has removable dies. See figure 2.



F/A-18-WRM-(26-1)01-CATI

Figure 2. Die Type

5. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

6. DIE INSTALLATION.

a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 3.

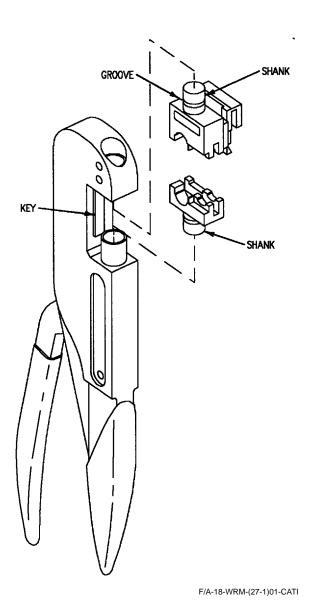


Figure 3. Die Installation

b. Close handle to make sure dies are seated and locked in place.

7. CRIMPING PROCEDURE.

a. Squeeze tool handles slowly until tool die holds terminal firmly in place, but without denting the terminal. See figure 4.

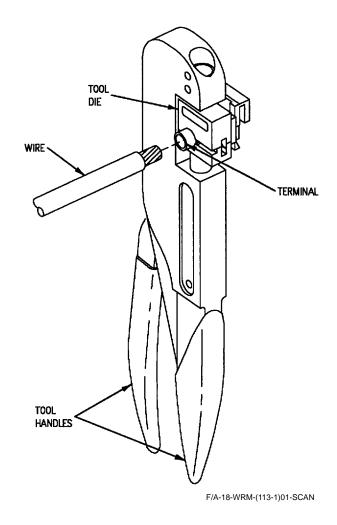


Figure 4. Crimping Positioning

- b. Insert stripped wire into terminal barrel, making sure wire extends 1/32-inch past terminal barrel, until wire butts flush inside end of wire barrel.
 - c. Squeeze tool handles until ratchet releases.
- d. Open handles and remove terminal and wire assembly. Inspect crimp for cracked terminal barrel, crushed wire insulation, wire not inserted far

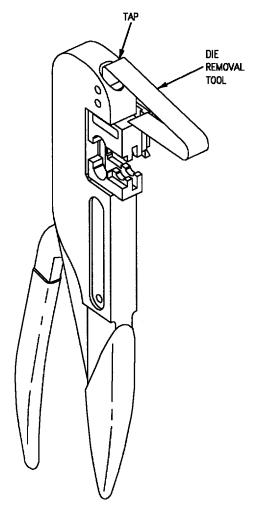
enough or inserted too far. If crimp is bad, cut the terminal off and begin again.

8. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inch in diameter may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 5.

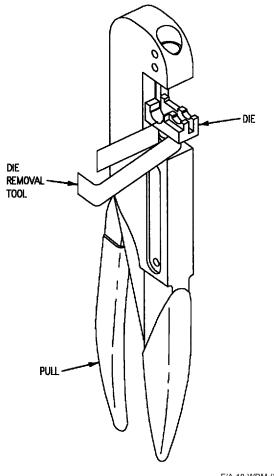


F/A-18-WRM-(29-1)01-CATI

Figure 5. Upper Die Removal

b. The die releases from the lock spring and ejects 1/16-inch. Remove die by hand.

c. Close crimping tool handle and slide the die removal tool between the die and tool body. See figure 6.



F/A-18-WRM-(30-1)01-CATI

Figure 6. Lower Die Removal

d. Pull handle open with a snap action. The die releases from the lock spring. Remove die by hand.

9. CRIMP TOOL H20 GENERAL DESCRIPTION.

a. This type of tool installs insulated or non-insulated terminals. By using two interchangeable female die turrets and adjusting the male die turret, the user may crimp terminals on 8 through 2 gage wire. See figure 7.

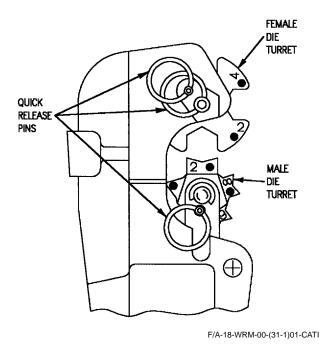


Figure 7. Die Turrets

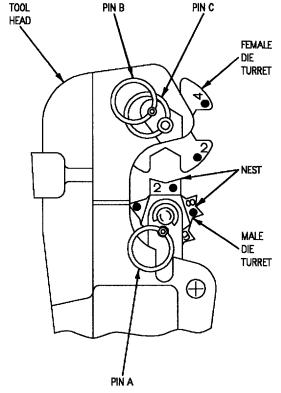
10. CRIMP TOOL H20 ASSEMBLY AND USE.

NOTE

Refer to paragraph 11 for insulated terminals or paragraph 14 for non-insulated terminals.

11. CRIMP TOOL ARRANGEMENT FOR INSULATED TERMINALS.

a. Remove pin A and rotate male die turret until required size nest is in up position. See figure 8.



F/A-18-WRM-00-(32-1)01-CATI

Figure 8. Die Turret Adjustment

- b. Install pin A to lock male die turret in position.
 - c. Remove pins B and C from tool head.

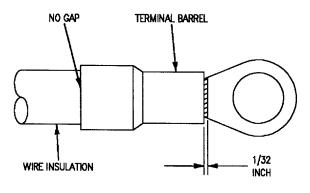


To ease installation of female die turret and prevent damage to the male die turret, make sure crimp tool handle is in the full open position.

- d. Slide female die turret (H20F) into tool head with wire size and color code on same side as the markings on the male die turret.
- e. Install pin C to hold female die turret in position.
- f. Rotate female die turret until wire size and color code match those set in male die turret.
- g. Install pin B through ring of pin C to lock the female die turret in position.

12. CRIMPING PROCEDURE - INSULATED TERMINALS.

a. Insert stripped wire into terminal until wire insulation butts flush inside terminal barrel. See figure 9.



F/A-18-WRM-(38-1)01-CATI

Figure 9. Insulated Terminal Wire Installation

b. Position terminal so that terminal insulation on tongue end is flush with face of female nest and barrel side of terminal faces the male die turret. See figure 10.

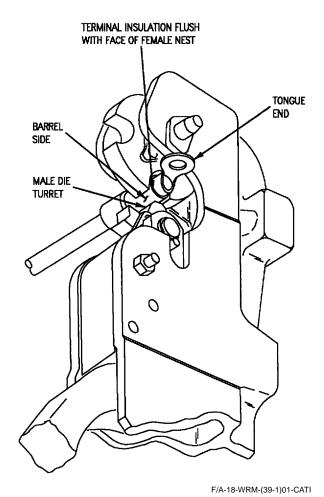


Figure 10. Crimp Positioning

c. Squeeze crimp tool handles until handle meets crimp stop. See figure 11.

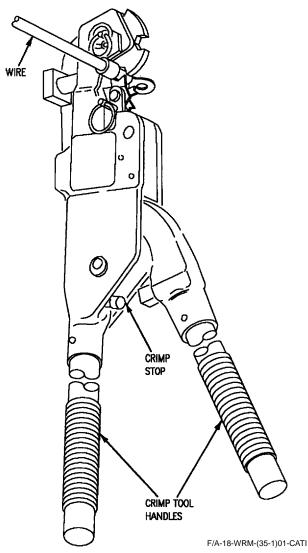


Figure 11. Crimp Terminal - Insulated

d. Open crimp tool handles and remove terminal and wire assembly. Inspect crimp for cracked terminal barrel, crushed wire insulation, wire not inserted far enough or inserted too far. If crimp is bad, cut the terminal off and begin again.

13. DIE TURRET REMOVAL - INSULATED.

- a. Remove pins B and C from tool head and remove female die turret. See figure 8.
 - b. Install pins B and C in tool head.

14. CRIMP TOOL ARRANGEMENT FOR NON-INSULATED TERMINALS.

a. Remove pin A and rotate male die turret until indentor with white spot is in up position. See figure 12.

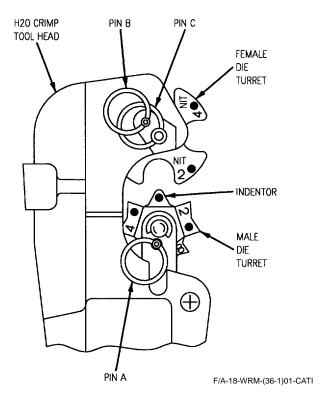


Figure 12. Indentor Positioning

- b. Install pin A to lock male die turret in position.
 - c. Remove pins B and C from tool head.



To ease installation of female die turret and prevent damage to the male die turret, make sure crimp tool handle is in the full open position.

- d. Slide female die turret (H20N) into tool head with wire size markings on same side as the markings on the male die turret.
- e. Install pin C to hold female die turret in position.

f. Rotate female die turret until required nest size is in line with indentor. See figure 13.

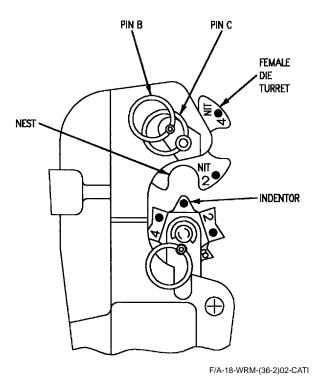


Figure 13. Female Die Adjustment

g. Install pin B through ring of pin C to lock the female die turret in position.

15. CRIMPING PROCEDURE - NON-INSULATED TERMINALS.

a. Insert stripped wire into terminal until wire insulation butts flush against terminal barrel. See figure

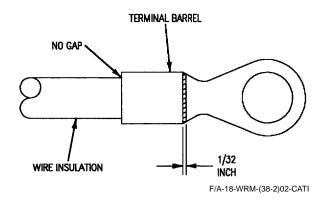


Figure 14. Non-Insulated Terminal Wire Installation

b. Position terminal so that end of terminal barrel at tongue end is flush with face of female nest and barrel side of terminal faces the male die turret. See figure 15.

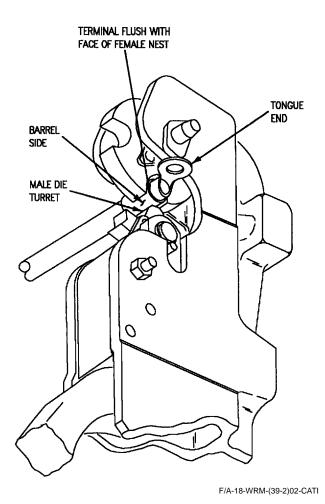


Figure 15. Non-Insulated Crimp Positioning

c. Squeeze crimp tool handles until handle meets crimp stop. See figure 16.

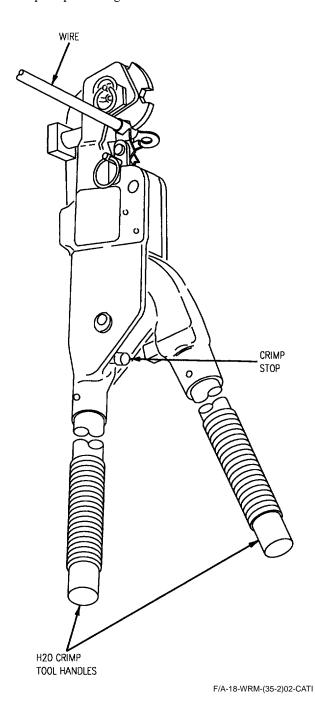


Figure 16. Crimping Terminal Non-Insulated

d. Open crimp tool handles and remove terminal and wire assembly. Inspect crimp for cracked terminal barrel, crushed wire insulation, wire not inserted far enough or inserted too far. If crimp is bad, cut terminal off and begin again.

16. DIE TURRET REMOVAL - NON-INSULATED.

- a. Remove pins B and C from tool head and remove female die turret. See figure 13.
 - b. Install pins B and C in tool head.

Table 1. Miscellaneous Terminal Crimping Data

		1				Use
Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	On Code
1A-A135	NEG	MS25036-116	H20	H20F (Red)	13/32 Inch	BCS
1A-A135	POS	MS25036-120	H20	H20F (Green)	17/32 Inch	BCS
1A-C023	NEG	MS25036-117	H20	H20F (Red)	13/32 Inch	
1A-C023	POS	MS25036-118	H20	H20F (Red)	13/32 Inch	
1A-C023	POS	MS25036-122	H20	H20F (Green)	17/32 Inch	
1A-D024	NEG	MS25036-117	H20	H20F (Red)	13/32 Inch	
1A-D024	POS	MS25036-114	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
1A-D024	POS	MS25036-122	H20	H20F (Green)	17/32 Inch	AL
1A-D024	POS	MS25036-118	H20	H20F (Red)	13/32 Inch	
1A-P001	G	MS25036-121	H20	H20F (Green)	17/32 Inch	
1A-P001	T1	MS25036-121	H20	H20F (Green)	17/32 Inch	
1A-P001	T2	MS25036-121	H20	H20F (Green)	17/32 Inch	
1A-P001	T3	MS25036-121	H20	H20F (Green)	17/32 Inch	
1A-R002	G	MS25036-121	H20	H20F (Green)	17/32 Inch	
1A-R002	T1	MS25036-121	H20	H20F (Green)	17/32 Inch	
1A-R002	T2	MS25036-121	H20	H20F (Green)	17/32 Inch	
1A-R002	T3	MS25036-121	H20	H20F (Green)	17/32 Inch	
1CBA073	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AL
				Large Cavity		
1CBA073	Load	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AL
				Large Cavity		
1CBA074	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AL
				Large Cavity		
1CBA074	Load	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AL
				Large Cavity		
1CBC025	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
1 CD C025	· 1	N 602502 (140	3.500.500.5	Large Cavity	0/161	
1CBC025	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
1 CD C027	т	MG25026 156	M22520/5 01	Small Cavity	0/20 I 1	
1CBC027	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
1CBC027	Load	MS25036-153	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
ICBC027	Load	MS23030-133	W122320/3-01	Small Cavity	5/10 IIICII	
1CBC028	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
ICBC028	Line	WI323030-130	W122320/3-01	Large Cavity	9/32 IIICII	
1CBC028	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
TCBC020	Load	W1525050 155	14122320/3 01	Small Cavity	3/10 men	
1CBC029	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
102002)	Line	1/1020000 100	1,122320/3 01	Large Cavity),52 men	
1CBC029	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1CBC038	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
1CBC038	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1CBC039	Line	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	BCT
				Small Cavity	1	

Table 1. Miscellaneous Terminal Crimping Data (Continued)

	1				1	Use
Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	On Code
1CBC039	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	BCS
				Large Cavity		
1CBC039	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1CBC048	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1CBC073	Line	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	BCT
				Small Cavity		
1CBC073	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	BCT
				Small Cavity		
1CBC075	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
1CBC075	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	BCT
				Small Cavity		
1CBC075	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	BCS
1.00.00.5		3.500.500.5140	3.522.520.55.04	Small Cavity	2/167	
1CBC085	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
1CDC006	T 1	MG25026 140	M22520/5 01	Small Cavity	2/161 1	
1CBC086	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
1CBC087	Lood	MS25036-149	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
ICBC08/	Load	WIS23030-149	W122320/3-01	Small Cavity	3/10 IIICII	
1CBC088	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
ICBC000	Line	WI323030-130	W122320/3-01	Large Cavity	9/32 IIICII	
1CBC088	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
TCBC000	Loud	WIS23030 147	1122320/3 01	Small Cavity	3/10 men	
1CBC136	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	BCS
1020100	2	1,152,000 100	1,12202070 01	Large Cavity	<i>y,</i> 62 men	200
1CBC136	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	BCS
				Small Cavity		
1CBC139	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	CC
				Large Cavity		
1CBC139	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	AI
				Small Cavity		
1CBC147	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	AI
				Small Cavity		
1CBD030	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
1CBD030	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
1000001		1505006 156	1.622.520/5.01	Small Cavity	0/22 1	4.77
1CBD031	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AK
1CDD021	Local	MS25026 152	M22520/5 01	Large Cavity M22520/5-100	2/16 In ah	
1CBD031	Load	MS25036-153	M22520/5-01	Small Cavity	3/16 Inch	
1CBD032	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AK
1CDD032	Line	141977020-120	IV122320/3-U1	Large Cavity	7/34 HICH	AN
1CBD032	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
1000032	Loau	141023030-133	14122320/3-01	Small Cavity	3/ 10 IIICII	
ľ	I	l	I	Sman Cavity	I	

Table 1. Miscellaneous Terminal Crimping Data (Continued)

	1		1			Use
Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	On Code
1CBD037	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
1CBD037	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1CBD045	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
1CBD045	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1CBD074	Line	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	BCQ
10000074		1505006 156	1.622.520/5.01	Small Cavity	0/22 1	D.CT
1CBD074	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	BCT
1CDD074	Tand	MC25026 152	M22520/5 01	Large Cavity M22520/5-100	2/1 C In als	DCT
1CBD074	Load	MS25036-153	M22520/5-01	Small Cavity	3/16 Inch	BCT
1CBD132	Line	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	BCU
1CDD132	Line	WI323030-133	10122320/3-01	Small Cavity	3/10 IIICII	ВСО
1CBD132	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	BCS
TCBD132	Load	WIS23030 133	1122320/3 01	Small Cavity	3/10 men	Des
1CBD133	Line	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	BCU
1022100	2	1,152,000 100	1,12202070 01	Small Cavity	<i>0,</i> 10 men	
1CBD133	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	BCS
				Small Cavity		
1CBD134	Line	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	BCU
				Small Cavity		
1CBD134	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	BCS
				Small Cavity		
1CRD124	A1	MS25036-115	H20	H20F (Red)	13/32 Inch	
1J-C021	Α	MS25036-118	H20	H20F (Red)	13/32 Inch	
1J-C021	В	MS25036-118	H20	H20F (Red)	13/32 Inch	
1J-C021	C	MS25036-118	H20	H20F (Red)	13/32 Inch	
1J-C021	Е	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1J-C021	F	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1J-C021	N	MS25036-118	H20	H20F (Red)	13/32 Inch	
1K-A130	G	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	AL
177 1 100		2220.47	1120	Small Cavity	17/22 1	
1K-A130	A1	322047	H20	H20F (Green)	17/32 Inch	AL
1K-A130	A2	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AL
11/ A 120	V1	MS25026 102	M22520/5 01	Large Cavity	2/16 In ah	A T
1K-A130	X1	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
1K-A130	X2	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	AL
112-12120	114	141977020-107	1 v1 22320/3-01	Small Cavity	J/ TO IIICII	AL
1K-C007	A1	MS25036-120	H20	H20F (Red)	13/32 Inch	
1K-C007	Al	M7928/1-16	M22520/5-01	M22520/5-100	3/16 Inch	
111 0007	1 11	111/20/110	1,122320/3 01	Small Cavity		
1K-C007	A2	MS25036-116	H20	H20F (Red)	13/32 Inch	
1	1	1	1 = -	1 === (====)	1	1 1

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
1K-C007	A3	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-C007	B1	MS25036-120	H20	H20F (Green)	17/32 Inch	
1K-C007	B1	M7928/1-16	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1K-C007	B2	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-C007	В3	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-C007	C1	M7928/1-16	M22520/5-01	M22520/5-100	3/16 Inch	
117 0007	C1	MG25026 120	1120	Small Cavity	12/22 I	
1K-C007	C1	MS25036-120	H20	H20F (Red)	13/32 Inch	
1K-C007	C2	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-C007	C3	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-C022	A1	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-C022	A1	M7928/1-25	M22520/5-01	M22520/5-100	13/32 Inch	
1K-C022	A2	MS25036-116	H20	Small Cavity H20F (Red)	13/32 Inch	
1K-C022	A3	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-C022	B1	MS25036-116 MS25036-116	H20 H20	H20F (Red)	13/32 Inch	
1K-C022	B1	M7928/1-25	M22520/5-01	M22520/5-100	13/32 Inch	
TK-C022	D1	W1/926/1-23	10122320/3-01	Small Cavity	13/32 IIICII	
1K-C022	B2	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-C022	B3	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-C022	C1	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-C022	C1	M7928/1-25	M22520/5-01	M22520/5-100	13/32 Inch	
				Small Cavity		
1K-C022	C2	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-C022	C3	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-C042	A1	C77U	M22520/5-01	M22520/5-100	15/32 Inch	
				Large Cavity		
1K-C042	A1	54575-1	H20	H20F (Red)	13/32 Inch	
1K-C042	A2	54575-1	H20	H20F (Red)	13/32 Inch	
1K-C042	A3	54575-1	H20	H20F (Red)	13/32 Inch	
1K-C042	X1	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
1K-C042	X2	MS25036-102	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
TK-C042	AZ	WI323030-102	10122320/3-01	Small Cavity	3/10 IIICII	
1K-C042	GND	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
111 0012	GIVE	WIS25050 102	10122320/3 01	Small Cavity	3/ TO INCH	
1K-C094	A1	C77U	M22520/5-01	M22520/5-100	15/32 Inch	BCT
				Large Cavity		
1K-C094	A2	C77U	M22520/5-01	M22520/5-100	15/32 Inch	BCT
				Large Cavity		
1K-C094	A3	C77U	M22520/5-01	M22520/5-100	15/32 Inch	BCT
				Large Cavity		
1K-C094	X1	MS25036-107	M22520/5-01	M22520/5-100	3/16 Inch	BCT
117 000 1	772	1605005 100	1.600.500.5.01	Small Cavity	2/167	D.CT
1K-C094	X2	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	BCT
	1		1	Small Cavity		

Table 1. Miscellaneous Terminal Crimping Data (Continued)

						Use
Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	On Code
1K-C094	GND	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	BCT
				Small Cavity		
1K-C097	A1	54575-1	H20	H20F (Red)	13/32 Inch	
1K-C097	A2	54575-1	H20	H20F (Red)	13/32 Inch	
1K-C097	A3	54575-1	H20	H20F (Red)	13/32 Inch	
1K-C097	X1	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1K-C097	X2	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1K-C097	GND	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1K-C145	A1	MS25036-116	H20	H20F (Red)	13/32 Inch	BGL
1K-C145	A2	MS25036-116	H20	H20F (Red)	13/32 Inch	AI
1K-C145	B1	MS25036-116	H20	H20F (Red)	13/32 Inch	BGL
1K-C145	B2	MS25036-116	H20	H20F (Red)	13/32 Inch	AI
1K-C145	C1	MS25036-116	H20	H20F (Red)	13/32 Inch	BGL
1K-C145	C2	MS25036-116	H20	H20F (Red)	13/32 Inch	AI
1K-D008	A1	M7928/1-16	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1K-D008	A1	MS25036-120	H20	H20F (Green)	17/32 Inch	
1K-D008	A2	MS25036-116	H20	H20F (Red)	13/32 Inch	AL
1K-D008	A2	MS25036-120	H20	H20F (Green)	17/32 Inch	DGO
1K-D008	A3	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-D008	B1	M7928/1-16	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1K-D008	B1	MS25036-120	H20	H20F (Green)	17/32 Inch	
1K-D008	B2	MS25036-116	H20	H20F (Red)	13/32 Inch	AL
1K-D008	B2	MS25036-120	H20	H20F (Green)	17/32 Inch	DGO
1K-D008	В3	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-D008	C1	M7928/1-16	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
1K-D008	C1	MS25036-120	H20	H20F (Green)	17/32 Inch	
1K-D008	C2	MS25036-116	H20	H20F (Red)	13/32 Inch	AL
1K-D008	C2	MS25036-120	H20	H20F (Green)	17/32 Inch	DGO
1K-D008	C3	MS25036-116	H20	H20F (Red)	13/32 Inch	
1K-D146	A1	MS25036-116	H20	H20F (Red)	13/32 Inch	BGL
1K-D146	A2	MS25036-116	H20	H20F (Red)	13/32 Inch	BGL
1K-D146	B1	MS25036-116	H20	H20F (Red)	13/32 Inch	BGL
1K-D146	B2	MS25036-116	H20	H20F (Red)	13/32 Inch	BGL
1K-D146	C1	MS25036-116	H20	H20F (Red)	13/32 Inch	BGL
1K-D146	C2	MS25036-116	H20	H20F (Red)	13/32 Inch	BGL
1S-G160	1	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	DGP
1S-G160	2	M7928/1-13	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	DGP
1S-G160	4	M7928/1-13	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	DGP

Table 1. Miscellaneous Terminal Crimping Data (Continued)

				<u> </u>	, , , , , , , , , , , , , , , , , , ,	Use
Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	On Code
1S-G160	5	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	DGP
				Small Cavity		
1S-G160	6	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	DGP
				Small Cavity		
1S-H141	1	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	DGQ
				Small Cavity		
1S-H141	1	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	CC
10 11141		MG25026 102	M22520/5 01	Small Cavity	2/161	DCD
1S-H141	2	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	DGR
1S-H141	2	M7928/1-13	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	BA
15-11141	2	W1/920/1-13	10122320/3-01	Small Cavity	3/10 IIICII	DA
1S-H141	4	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	BGL
15 111 11		141525050 102	14122320/3 01	Small Cavity	3/10 men	DOL
1S-H141	5	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	BGL
				Small Cavity		
1S-H141	7	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	BGL
				Small Cavity		
1S-H141	8	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	BGL
				Small Cavity		
1S-H141	10	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	BGL
10 11141	11	MG25026 102	M22520/5 01	Small Cavity	2/161	D.CI
1S-H141	11	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BGL
1S-J017	2	M7928/1-3	M22520/5-01	M22520/5-100	5/32 Inch	
15 3017		1417/20/1 3	14122320/3 01	Small Cavity	3/32 men	
1S-J017	3	M7928/1-3	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
1S-J018	2	M7928/1-3	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
1S-J018	3	M7928/1-3	M22520/5-01	M22520/5-100	5/32 Inch	
1E D046		N/7020/1 40	N 100 500 /5 01	Small Cavity	2/167	
1T-D046	G	M7928/1-40	M22520/5-01	M22520/5-100	3/16 Inch	
1T-D046	HV	M7928/1-13	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
11-2040	11 4	W1/ /20/ 1-13	14122320/3-01	Small Cavity	3/10 men	
1T-D046	LV	M7928/1-40	M22520/5-01	M22520/5-100	3/16 Inch	
	·			Small Cavity		
1X-C009	A1	MS25036-115	H20	H20F (Red)	13/32 Inch	BEV
1X-C009	A2	MS25036-115	H20	H20F (Red)	13/32 Inch	BEV
1X-C009	B1	MS25036-115	H20	H20F (Red)	13/32 Inch	BEV
1X-C009	B2	MS25036-115	H20	H20F (Red)	13/32 Inch	BEV
1X-C009	C1	MS25036-115	H20	H20F (Red)	13/32 Inch	BEV
1X-C009	C2	MS25036-115	H20	H20F (Red)	13/32 Inch	BEV
1X-C107	A1	MS25036-112	M22520/5-01	M22520/5-100	9/32 Inch	
1W C107	4.2	MC25026 115	1120	Large Cavity	12/20 11	
1X-C107	A2	MS25036-115	H20	H20F (Red)	13/32 Inch	DEV
1X-D010	A1	MS25036-115	H20	H20F (Red)	13/32 Inch	BEV

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part	Crimp Tool	Die	Strip Length	Use On
		Number				Code
1X-D010	A2	MS25036-115	H20	H20F (Red)	13/32 Inch	BEV
1X-D010	B1	MS25036-115	H20	H20F (Red)	13/32 Inch	BEV
1X-D010	B2	MS25036-115	H20	H20F (Red)	13/32 Inch	BEV
1X-D010	C1	MS25036-115	H20	H20F (Red)	13/32 Inch	BEV
1X-D010	C2	MS25036-115	H20	H20F (Red)	13/32 Inch	BEV
1X-D026	A1	MS25189-102	H20	H20N (Red)	13/32 Inch	
1X-D026	A2	MS25189-102	H20	H20N (Red)	13/32 Inch	
1X-D108	A1	MS25036-112	M22520/5-01	M22520/5-100	9/32 Inch	BCT
177 7 100				Large Cavity		
1X-D108	A1	MS25036-115	H20	H20F (Red)	13/32 Inch	
1X-D108	A2	MS25036-112	M22520/5-01	M22520/5-100	9/32 Inch	
1X-E123	A1	MS25189-102	H20	Large Cavity H20N (Red)	13/32 Inch	
				` '		
1X-E123	A2	MS25189-102	H20	H20N (Red)	13/32 Inch	
10CBC016	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
10CBD001	Line	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
ТОСВБООТ	Line	141525050 155	14122320/3 01	Small Cavity	3/10 men	
10CBD001	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
12CBD002	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
12CBD002	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AJ
				Large Cavity		
12CBD002	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
12CDD020	T 1	MC25026 156	M22520/5 01	Small Cavity	0/20 I1	
12CBD028	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
12CBD028	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
12CDD026	Loau	WI323030-140	W122320/3-01	Small Cavity	3/32 men	
12CBD070	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AH
				Large Cavity	.,,,,,	
12CBD070	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
12CBD071	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
12CBH003	Line	M7928/1-23	M22520/5-01	M22520/5-100	3/16 Inch	
12CD11002	T 1	M7020/1 41	M22520/5 01	Small Cavity	2/16 L1.	
12CBH003	Line	M7928/1-41	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
12CBH003	Load	M7928/1-14	M22520/5-01	M22520/5-100	3/16 Inch	
120011003	Load	1717/20/1-17	14122320/3-01	Small Cavity	5, 10 men	
12CBJ001	Line	M7928/1-23	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
12CBJ001	Line	M7928/1-41	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
12CBJ001	Load	M7928/1-14	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part	Crimp Tool	Die	Strip Length	Use On
		Number				Code
13CBC001	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
13CBC001	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	
1.5GD G004		3.5500014	3.500.500.5	Small Cavity	5 (00 X)	
15CBC001	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	
17CBC002	Lood	MS25036-149	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	AD
17CBC002	Load	WIS23030-149	W122320/3-01	Small Cavity	3/10 IIICII	AD
17CBC002	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	AC
1760002	Loud	WIS23030 133	14122320/3 01	Small Cavity	3/ 10 men	710
17CBC003	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	AD
				Small Cavity		
17CBC003	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	AC
				Small Cavity		
17CBC004	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	AD
.======				Small Cavity		
17CBC004	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	AC
17CBC021	Load	M7928/1-4	M22520/5-01	Small Cavity M22520/5-100	5/32 Inch	
1/CBC021	Load	N1/926/1-4	W122320/3-01	Small Cavity	3/32 111011	
17CBD001	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AJ
1760001	Line	WIS23030 130	14122320/3 01	Large Cavity	7/32 men	713
17CBD001	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
17CBD005	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	AD
				Small Cavity		
17CBD005	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	AC
15CDD006		N. 600 500 6 140	1.622.520/5.01	Small Cavity	0/167	4.5
17CBD006	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	AD
17CBD006	Load	MS25036-153	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	AC
17CDD000	Load	WI323030-133	W122320/3-01	Small Cavity	3/10 IIICII	AC
17CBD007	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	AD
				Small Cavity		
17CBD007	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	AC
				Small Cavity		
18CBH001	Line	M7928/1-23	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
18CBH001	Load	M7928/1-14	M22520/5-01	M22520/5-100	3/16 Inch	
19CBJ001	Lina	M7928/1-23	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
13CDJUU1	Line	101/7/0/1-23	1V12232U/3-U1	Small Cavity	3/10 HICH	
19CBJ001	Load	M7928/1-14	M22520/5-01	M22520/5-100	3/16 Inch	
1702001	Loud	1.1/20/111	1.122320,3 01	Small Cavity	o, io mon	
2CBC001	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
2CBC007	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	BCS
				Large Cavity		

Table 1. Miscellaneous Terminal Crimping Data (Continued)

		Terminal Part	1			Use
Ref Des	Pin	Number	Crimp Tool	Die	Strip Length	On Code
2CBC007	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
2CRN006	NEG	MS25036-154	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
2S-G002	1	M7928/1-22	M22520/5-01	M22520/5-100	3/16 Inch	
20.002		M7020/1 12	M22520/5 01	Small Cavity M22520/5-100	3/16 Inch	
2S-G002	2	M7928/1-13	M22520/5-01	Small Cavity	3/16 Inch	
2S-G002	3	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	
25-0002		W17720/1-13	10122320/3-01	Small Cavity	3/10 men	
2S-P023	1	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
2S-P023	2	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
2S-P023	3	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
20CBC001	Line	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	BCT
				Small Cavity		200
20CBC001	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	BCS
20CDC001	Tand	MC25026 140	M22520/5 01	Large Cavity M22520/5-100	2/1 C In als	
20CBC001	Load	MS25036-149	M22520/5-01	Small Cavity	3/16 Inch	
20CBC002	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
20CBC002	Line	WIS23030-130	10122320/3-01	Large Cavity	7/32 men	
20CBC002	Load	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
20K-L004	G	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
20K-L004	A1	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
20K-L004	A2	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
2017 1 004	A 2	M925026 156	M22520/5 01	Large Cavity	0/22 I1	
20K-L004	A3	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AA
20K-L004	X1	M7928/1-13	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
2014-12004	711	W17720/1-13	10122320/3-01	Small Cavity	3/10 men	
20K-L004	X2	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
20K-L005	G	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
20K-L005	A1	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
20K-L005	A2	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
2017 1 007	4.2	MG25025 155	M22520/5 01	Large Cavity	0/22 I 1	
20K-L005	A3	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AA
20K-L005	X1	M7928/1-13	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
20K-L003	Λ1	1/1/7/20/1-13	1V12232U/3-U1	Small Cavity	J/ 10 IIICII	
I	I	I	I	I Sman Cavity	I	1 1

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
20K-L005	X2	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	
20K-L015	G	M7928/1-13	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	AA
20K-L015	A1	MS25036-156	M22520/5-01	Small Cavity M22520/5-100 Large Cavity	9/32 Inch	AA
20K-L015	A2	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AA
20K-L015	A3	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AA
20K-L015	X1	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
20K-L015	X2	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
20S-C010	1	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
20S-C010	2	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
20S-C010	3	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
20S-C010	4	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
20S-C010	5	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
20S-C010	6	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
22CBC035	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
22CBC040	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
22CBC040	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
22CBC062	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
22CBC062	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
22CBC062	Load	M7928/1-4	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BG
22CBC063	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
22CBC063	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
22CBC063	Load	M7928/1-4	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	BG
22CBC064	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
22CBC064	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
22CBC064	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	BG
2202001	Louis	1,17,20,1	1012232073 01	Small Cavity	5/32 men	20
22CBC074	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
22CBC074	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
22CD C077	, ,	MG05026 140	M00500/5 01	Small Cavity	2/16 1	
22CBC077	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
22CBC078	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
22020070	Louis	1/1525050 1 15	1012232073 01	Small Cavity	S, 10 men	
22CBC079	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
22CBC080	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
22CBC081	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
22CBC082	Load	MS25036-149	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
22CBC062	Load	WIS23030-149	10122320/3-01	Small Cavity	5/10 IIICII	
22CBC106	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AI
22020100		1/1520000 100	1/122020/0 01	Large Cavity	J/62 men	111
22CBC106	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
22CBD020	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
22CDD024	, ,	14025026 140	N 600 500 / 5 01	Small Cavity	2/16 7 1	
22CBD034	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
22CBD036	Line	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	AJ
22CBD030	Line	141525050 155	14122320/3 01	Small Cavity	3/10 men	713
22CBD036	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AJ
				Large Cavity		
22CBD036	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
22CBD037	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AJ
22CBD037	Load	MS25036-149	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
22CBD037	Loau	WIS23030-149	10122320/3-01	Small Cavity	3/10 IIICII	
22CBD052	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
22CBD052	Load	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
22CBD053	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
22CPD052	Load	MS25026 156	M22520/5 01	Large Cavity	0/22 Inch	
22CBD053	Load	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
22CBD054	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
22022031		1.1020000 100	1.12232073 01	Large Cavity	,, 52 mon	
22CBD054	Load	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		

Table 1. Miscellaneous Terminal Crimping Data (Continued)

		Tamain al Bant				Use
Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	On Code
22CBD057	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
22CBD059	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
22CBD060	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
22CDD061	r 1	N 602502 (140	1.622.520./5. 0.1	Small Cavity	2/167	
22CBD061	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
22CBD070	Line	MS25036-156	M22520/5-01	Small Cavity M22520/5-100	9/32 Inch	
22CBD070	Line	WIS23030-130	10122320/3-01	Large Cavity	9/32 IIICII	
22CBD070	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
22022010	Loud	1/1525050 1 10	1,122,20,5 01	Small Cavity	3/32 men	
22CBD071	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AK
				Large Cavity		
22CBD071	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
22CBD094	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
22CBD104	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
22CPD 104	r 1	N/7020/1 /	1.622.520.75.01	Large Cavity	5/00 X 1	
22CBD104	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	
22CBD173	Load	MS25036-149	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	BU
22CBD173	Load	WIS23030-149	10122320/3-01	Small Cavity	3/10 IIICII	ВО
22K-D055	A1	M7928/1-58	M22520/5-01	M22520/5-100	9/32 Inch	
2211 0033	711	1417720/1 30	14122320/3 01	Small Cavity	7/32 men	
22K-D055	A2	M7928/1-58	M22520/5-01	M22520/5-100	9/32 Inch	
				Small Cavity		
22K-D055	B1	M7928/1-58	M22520/5-01	M22520/5-100	9/32 Inch	
				Small Cavity		
22K-D055	B2	M7928/1-58	M22520/5-01	M22520/5-100	9/32 Inch	
				Small Cavity		
22K-D055	C1	M7928/1-58	M22520/5-01	M22520/5-100	9/32 Inch	
2017 DOSS	CO	M7020/1 70	M22520/5 01	Small Cavity	0/22 1	
22K-D055	C2	M7928/1-58	M22520/5-01	M22520/5-100	9/32 Inch	
22K-D055	X1	M7928/1-2	M22520/5-01	Small Cavity M22520/5-100	5/32 Inch	
22K-D033	ΛI	N1/920/1-2	W122320/3-01	Small Cavity	3/32 men	
22K-D055	X2	M7928/1-11	M22520/5-01	M22520/5-100	3/16 Inch	
2211 2033	112	1,17,520,111	1,122,20,5 01	Small Cavity	S/ 10 men	
22S-A091	2	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
22S-A091	3	M7928/1-3	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
22S-A091	5	M7928/1-3	M22520/5-01	M22520/5-100	5/32 Inch	
229 4 221		> 450.00 to 2		Small Cavity		
22S-A091	6	M7928/1-3	M22520/5-01	M22520/5-100	5/32 Inch	
			[Small Cavity	[

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
22S-A105	1	M7928/1-2	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
22S-A105	2	M7928/1-2	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
22S-A105	3	M7928/1-2	M22520/5-01	M22520/5-100	5/32 Inch	
223 1105		3.5500014.0	3.500.500.5	Small Cavity	5 /20 X 1	
22S-A105	4	M7928/1-2	M22520/5-01	M22520/5-100	5/32 Inch	
22S-A105	5	M7928/1-2	M22520/5-01	Small Cavity M22520/5-100	5/32 Inch	
223-A103	3	N1/920/1-2	10122320/3-01	Small Cavity	3/32 IIICII	
22S-J058	1	M7928/1-3	M22520/5-01	M22520/5-100	5/32 Inch	
225 0050	1	1117520/13	1,122,320,3 01	Small Cavity	3,32 men	
22S-J058	2	M7928/1-3	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
22S-J058	3	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	DHA
				Small Cavity		
22S-J058	4	M7928/1-3	M22520/5-01	M22520/5-100	5/32 Inch	DHA
	_			Small Cavity		
22S-J058	5	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	CFI
22S-J058	5	M7928/1-3	M22520/5-01	Small Cavity M22520/5-100	5/32 Inch	DHA
223-3036	3	W1/920/1-3	W122320/3-01	Small Cavity	3/32 IIICII	рпа
22S-J058	6	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	AC
225 0050		111525050 102	1,122,320,3 01	Small Cavity	3, 10 men	110
22S-J058	6	M7928/1-3	M22520/5-01	M22520/5-100	5/32 Inch	AD
				Small Cavity		
22S-J095	1	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
22S-J095	2	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	
00G I 115	1	MG25026 102	M22520/5 01	Small Cavity	2/16 1	DI
22S-L115	1	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BI
22S-L115	1	M7928/1-3	M22520/5-01	M22520/5-100	5/32 Inch	ВН
225-L115	1	W17920/1-3	10122320/3-01	Small Cavity	3/32 men	DII
22S-L115	2	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	DHB
				Small Cavity		
22S-L115	2	MS25036-145	M22520/5-01	M22520/5-100	5/32 Inch	CFF
				Small Cavity		
22S-L115	3	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	DHB
				Small Cavity		
22S-L115	4	M7928/1-3	M22520/5-01	M22520/5-100	5/32 Inch	DHB
22S-L115	5	MS25036-102	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	DHC
223-L113		WIS23030-102	14144340/3-01	Small Cavity	3/ 10 IIICII	DHC
22S-L115	5	M7928/1-3	M22520/5-01	M22520/5-100	5/32	CFC
220 2110		227/20/13	1122320/3 01	Small Cavity	0,32	
22S-L115	6	MS25036-102	M22520/5-01	M22520/5-100	5/32 Inch	DHC
				Small Cavity		

Table 1. Miscellaneous Terminal Crimping Data (Continued)

						Use
Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	On Code
22S-L115	6	M7928/1-3	M22520/5-01	M22520/5-100	5/32	CFC
				Small Cavity		
22S-P032	1	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
22S-P032	2	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
23CBD001	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AK
22000001		1.500.500.5.1.1.5		Large Cavity	7/00 X 1	
23CBD001	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
24CBC018	Line	MS25036-156	M22520/5-01	Small Cavity M22520/5-100	9/32 Inch	
24CBC016	Line	W1323030-130	10122320/3-01	Large Cavity	9/32 IIICII	
24CBC018	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
2.020010	2000	111020 000 110		Small Cavity	0,02 111011	
24CBD001	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
25CBC001	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
25CBC003	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AA
				Large Cavity		
25CBC003	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	BJ
25CD C002	T 1	MG25026 152	M22520/5 01	Small Cavity	2/16 1	DIZ
25CBC003	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BK
28CBC001	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
26CBC001	Load	WI323030-149	10122320/3-01	Small Cavity	3/10 IIICII	
28CBC003	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
28CBC005	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
28CBD002	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
28CBD004	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
20CDD007	T 1	M925026 156	M22520/5 01	Small Cavity	0/22 I 1	A T
28CBD007	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AJ
28CBD007	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
26CBD007	Load	WI323030-140	10122320/3-01	Small Cavity	3/32 IIICII	
28E-A013	PWR	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	
	1 1111	111020 000 100		Small Cavity	0, 10 mm	
28E-A021	PWR	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
28E-B014	PWR	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
28E-B022	PWR	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	
205 5010	DIA	MG25025 102	M22520/5 04	Small Cavity	2/16 1	
28E-E019	PWR	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	
l	I	1	l	Small Cavity		

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
28E-E019	PWR	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	
28S-J008	1	MS25036-148	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
28S-J008	2	MS25036-148	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
28S-J008	3	MS25036-148	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
28S-J008	4	MS25036-148	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
28S-J008	5	MS25036-148	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
3CBC012	Line	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
3CBC012	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
3CBC021	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AI
3CBC021	Load	M7928/1-4	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
3CBC025	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
3CBC025	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
3CBC038	Load	M7928/1-4	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
3CBC039	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
3CBC039	Load	M7928/1-4	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
3CBC040	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
3CBC040	Load	M7928/1-4	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
3CBD029	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AJ
3CBD029	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
3CBD041	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
3CBD042	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
3CBD043	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
3CBD052	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
3CBD052	Load	M7928/1-4	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
3CBD062	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	AHI
				Small Cavity		
3CBD076	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
3CBD077	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
3CBD077	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	
33CBD001	T 1	M7020/1 4	M22520/5 01	Small Cavity M22520/5-100	5/20 I 1	
33CBD001	Load	M7928/1-4	M22520/5-01	Small Cavity	5/32 Inch	
33CBD003	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
33CDD003	Line	WI323030-130	W122320/3-01	Large Cavity	9/32 men	
33CBD003	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
336222003	Loud	111525050 110	1112232073 01	Small Cavity	3/32 men	
33CBD004	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
33CBD004	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
33CBD005	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
33CBD005	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
33CBD010	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	
24CDD001	T in a	M925026 156	M22520/5 01	Small Cavity M22520/5-100	0/22 In als	
34CBD001	Line	MS25036-156	M22520/5-01	Large Cavity	9/32 Inch	
34CBD001	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
34CBD001	Loud	141525050 147	14122320/3 01	Small Cavity	3/10 men	
34CBD002	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AJ
				Large Cavity		
34CBD002	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
34CBD002	Line	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	BCU
				Small Cavity		
34S-H007	1	M7928/1-2	M22520/5-01	M22520/5-100	5/32 Inch	
249 ******		3.55000011.0	1.500.500.55.04	Small Cavity		
34S-H007	2	M7928/1-2	M22520/5-01	M22520/5-100	5/32 Inch	
240 11007	3	M7029/1 2	M22520/5 01	Small Cavity	5/20 In als	
34S-H007	3	M7928/1-2	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
34S-H007	4	M7928/1-2	M22520/5-01	M22520/5-100	5/32 Inch	
J-5 11007		1411 720/1-2	14122320/3-01	Small Cavity	5/52 IIICII	
34S-H007	5	M7928/1-2	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
4CBC002	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
4CBD001	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	BM
				Large Cavity		

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
4CBD001	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
4CBD100	Load	MS25036-149	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
4P-T109A	EMI	MS25036-102	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
4P-T109B	EMI	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
4P-T109C	EMI	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
4S-H026	1	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
4S-H026	2	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
4S-H026	3	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
4S-H026	4	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
4S-H026	5	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
4S-H026	6	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
5A-E028	1	NW21	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
5A-E028	2	NW22	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
5A-E028	3	NW23	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
5A-F028	1	NW21	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
5A-F028	2	NW22	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
5A-F028	3	NW23	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AE
5A-F029	1	NW21	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DHD
5A-F029	2	NW22	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DHD
5A-F029	3	NW23	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	DHD
5A-U037	1	NW21	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
5A-U037	2	NW22	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
5A-U037	3	NW23	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
5A-U038	1	NW21	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Miscellaneous Terminal Crimping Data (Continued)

5A-U038 2 NW22 M22520/S-01 M22520/S-100 3/16 Inch 5A-U038 3 NW23 M22520/S-01 M22520/S-100 3/16 Inch 5A-U039 1 NW21 M22520/S-01 M22520/S-100 3/16 Inch 5A-U039 2 NW22 M22520/S-01 M22520/S-100 3/16 Inch 5A-U039 3 NW23 M22520/S-01 M22520/S-100 3/16 Inch 5A-V041 1 NW21 M22520/S-01 M22520/S-100 3/16 Inch 5A-V041 2 NW22 M22520/S-01 M22520/S-100 3/16 Inch 5A-V041 3 NW23 M22520/S-01 M22520/S-100 3/16 Inch 5A-V041 3 NW23 M22520/S-01 M22520/S-100 3/16 Inch 5A-V042 1 NW21 M22520/S-01 M22520/S-100 3/16 Inch 5A-V043 1 NW21 M22520/S-01 M22520/S-100 3/16 Inch 5A-V043 2 NW22 M22520/S-01 M22520/S-100 3/16 Inch	Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
5A-U038 3 NW23 M22520/S-01 M22520/S-100 3/16 Inch 5A-U039 1 NW21 M22520/S-01 M22520/S-100 3/16 Inch 5A-U039 2 NW22 M22520/S-01 M22520/S-100 3/16 Inch 5A-U039 3 NW23 M22520/S-01 M22520/S-100 3/16 Inch 5A-V041 1 NW21 M22520/S-01 M22520/S-100 3/16 Inch 5A-V041 2 NW22 M22520/S-01 M22520/S-100 3/16 Inch 5A-V041 3 NW23 M22520/S-01 M22520/S-100 3/16 Inch 5A-V041 3 NW23 M22520/S-01 M22520/S-100 3/16 Inch 5A-V042 1 NW21 M22520/S-01 M22520/S-100 3/16 Inch 5A-V042 2 NW22 M22520/S-01 M22520/S-100 3/16 Inch 5A-V043 1 NW21 M22520/S-01 M22520/S-00 3/16 Inch 5A-V043 2 NW22 M22520/S-01 M22520/S-00 3/16 Inch	5A-U038	2	NW22	M22520/5-01	M22520/5-100	3/16 Inch	
SA-U039					Small Cavity		
5A-U039 1 NW21 M22520/5-01 M22520/5-100 3/16 Inch 5A-U039 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch 5A-U039 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5A-V041 1 NW21 M22520/5-01 M22520/5-100 3/16 Inch 5A-V041 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch 5A-V041 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5A-V041 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5A-V042 1 NW21 M22520/5-01 M22520/5-100 3/16 Inch 5A-V042 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5A-V042 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5A-V043 1 NW21 M22520/5-01 M22520/5-100 3/16 Inch 5A-V043 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch	5A-U038	3	NW23	M22520/5-01		3/16 Inch	
SA-U039					_		
5A-U039 2 NW22 M22520/5-01 M22520/5-100 small Cavity 3/16 Inch 5A-U039 3 NW23 M22520/5-01 M22520/5-100 small Cavity 3/16 Inch 5A-V041 1 NW21 M22520/5-01 M22520/5-100 small Cavity 3/16 Inch 5A-V041 2 NW22 M22520/5-01 M22520/5-100 small Cavity 3/16 Inch 5A-V041 3 NW23 M22520/5-01 M22520/5-100 small Cavity 3/16 Inch 5A-V042 1 NW21 M22520/5-01 M22520/5-100 small Cavity 3/16 Inch 5A-V042 2 NW22 M22520/5-01 M22520/5-100 small Cavity 3/16 Inch 5A-V042 3 NW23 M22520/5-01 M22520/5-100 small Cavity 3/16 Inch 5A-V043 1 NW21 M22520/5-01 M22520/5-100 small Cavity 3/16 Inch 5A-V043 2 NW22 M22520/5-01 M22520/5-100 small Cavity 3/16 Inch 5A-V043 3 NW23 M22520/5-01 M22520/5-100 small Cavity 3/16 Inch <td< td=""><td>5A-U039</td><td>1</td><td>NW21</td><td>M22520/5-01</td><td></td><td>3/16 Inch</td><td></td></td<>	5A-U039	1	NW21	M22520/5-01		3/16 Inch	
SA-U039 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity M22520/5-100 Small Cavity SA-V041 1 NW21 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity SA-V041 2 NW22 M22520/5-01 M22520/5-100 Small Cavity M22520/5-100 Small Cavity M22520/5-100 Small Cavity M22520/5-100 Small Cavity M22520/5-100 M22520/5-100 Small Cavity M22520/5-100 M22520/5-1	5 A 11020		NINVOO	M22520/5 01	_	2/16 I1	
5A-U039 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch Small Cavity 5A-V041 1 NW21 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch Small Cavity 5A-V041 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch Small Cavity 5A-V042 1 NW21 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch Small Cavity 5A-V042 2 NW22 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch Small Cavity 5A-V042 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch Small Cavity 5A-V043 1 NW21 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch Small Cavity 5A-V043 2 NW22 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch Small Cavity 5A-V043 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch Small Cavity 5A-Y062 1 M7928/1-13 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch Small Cavity 5A-Y062 2 M79	5A-0039	2	NW 22	M122520/5-01		3/16 Incn	
5A-V041 1 NW21 M22520/5-01 Small Cavity M22520/5-100 Small Cavity Small Cavity 3/16 Inch Small Cavity 5A-V041 2 NW22 M22520/5-01 M22520/5-100 M22520/5-100 M22520/5-100 Small Cavity 3/16 Inch Small Cavity 5A-V041 3 NW23 M22520/5-01 M22520/5-100	5 A - I IO3 Q	3	NW23	M22520/5 ₋ 01	•	3/16 Inch	
5A-V041 1 NW21 M22520/5-01 M22520/5-100 3/16 Inch 5A-V041 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch 5A-V041 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5A-V042 1 NW21 M22520/5-01 M22520/5-100 3/16 Inch 5A-V042 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch 5A-V042 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5A-V042 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5A-V043 1 NW21 M22520/5-01 M22520/5-100 3/16 Inch 5A-V043 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch 5A-V043 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 1 M7928/1-13 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch </td <td>3A-0037</td> <td></td> <td>1 W 23</td> <td>14122320/3-01</td> <td></td> <td>3/10 men</td> <td></td>	3A-0037		1 W 23	14122320/3-01		3/10 men	
5A-V041 2 NW22 M22520/5-01 Small Cavity M22520/5-100 Small Cavity 3/16 Inch 5A-V041 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V042 1 NW21 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V042 2 NW22 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V042 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 1 NW21 M22520/5-01 M22520/5-100 M22520/	5A-V041	1	NW21	M22520/5-01	•	3/16 Inch	
SA-V041 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity M22520/5-100 Small Cavity M22520/5-100 3/16 Inch Small Cavity M22520/5-100 M22520/5-100 3/16 Inch Small Cavity M22520/5-100 M22520/5-100 3/16 Inch Small Cavity M22520/5-100 M22520/5-10							
5A-V041 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V042 1 NW21 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V042 2 NW22 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V042 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 1 NW21 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 2 NW22 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 1 M7928/1-13 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 2 M7928/1-14 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch	5A-V041	2	NW22	M22520/5-01	M22520/5-100	3/16 Inch	
SA-V042					Small Cavity		
5A-V042 1 NW21 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V042 2 NW22 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V042 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 1 NW21 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 2 NW22 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 1 M7928/1-13 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 1 NW21 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 2 M7928/1-14 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch </td <td>5A-V041</td> <td>3</td> <td>NW23</td> <td>M22520/5-01</td> <td></td> <td>3/16 Inch</td> <td></td>	5A-V041	3	NW23	M22520/5-01		3/16 Inch	
5A-V042 2 NW22 M22520/5-01 Small Cavity M22520/5-100 3/16 Inch Small Cavity 5A-V042 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-V043 1 NW21 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-V043 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-V043 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-V043 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-Y062 1 M7928/1-13 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-Y062 1 NW21 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-Y062 2 M7928/1-14 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5CBC001 Line MS25036-156 M22520/5-01 M22520/5-100 5/32 Inch Small Cavity 5CBC00					•		
5A-V042 2 NW22 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V042 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 1 NW21 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 2 NW22 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 1 M7928/1-13 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 1 M7928/1-13 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 1 NW21 M22520/5-01 M22520/5-100 M	5A-V042	1	NW21	M22520/5-01		3/16 Inch	
5A-V042 3 NW23 M22520/5-01 Small Cavity M22520/5-100 M22520/5-100 3/16 Inch 5A-V043 1 NW21 M22520/5-01 M22520/5-100 M2							
5A-V042 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 1 NW21 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 2 NW22 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 1 M7928/1-13 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 1 NW21 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 2 M7928/1-14 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 2 NW22 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5CBC001 Line MS25036-156 M22520/5-01 M22520/5-100 Small Cavity 3/2 Inch	5A-V042	2	NW22	M22520/5-01		3/16 Inch	
5A-V043 1 NW21 M22520/5-01 Small Cavity M22520/5-100 3/16 Inch Small Cavity 5A-V043 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch 5A-V043 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5A-V062 1 M7928/1-13 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 1 NW21 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 2 M7928/1-14 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 2 M7928/1-14 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5CBC001 Line MS25036-156 M22520/5-0	54 3/042	2	NIW22	M22520/5 01	•	2/16 In ah	
5A-V043 1 NW21 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 2 NW22 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 1 M7928/1-13 M22520/5-01 M22520/5-100 M2252	3A-VU42	3	INW 25	W122320/3-01		3/10 IIICII	
5A-V043 2 NW22 M22520/5-01 Small Cavity M22520/5-100 Small Cavity M22520/5-100 3/16 Inch M22520/5-100	5A-V043	1	NW21	M22520/5-01	•	3/16 Inch	
5A-V043 2 NW22 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-V043 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 1 M7928/1-13 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 1 NW21 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 2 M7928/1-14 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 2 NW22 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 3/16 Inch 5CBC001 Line MS25036-156 M22520/5-01 M22520/5-100 Small Cavity 5/32 Inch 5CBC002 Line MS25036-156 M22520/5-01 M22520/5-100 Small Cavity 5/32 In	311 1013	1	11,11,21	10122320/3 01		3/10 men	
5A-V043 3 NW23 M22520/5-01 Small Cavity M22520/5-100 Small Cavity 5A-Y062 1 M7928/1-13 M22520/5-01 M22520/5-100 M22520/5-1	5A-V043	2	NW22	M22520/5-01	•	3/16 Inch	
5A-Y062 1 M7928/1-13 M22520/5-01 Small Cavity M22520/5-100 3/16 Inch Small Cavity 5A-Y062 1 NW21 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-Y062 2 M7928/1-14 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-Y062 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5CBC001 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch Small Cavity 5CBC002 Line MS25036-156 M22520/5-01 M22520/5-100 5/32 Inch Small Cavity 5CBC002 Load MS25036-149 M22520/5-01 M22520/5-100 9/32 Inch Large Cavity 5CBC002 Load MS25036-149 M22520/5-01 M22520/5-100 3/16 Inch							
5A-Y062 1 M7928/1-13 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 1 NW21 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 2 M7928/1-14 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5CBC001 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch 5CBC002 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch 5CBC002 Load MS25036-149 M22520/5-01 M22520/5-100 3/16 Inch	5A-V043	3	NW23	M22520/5-01	M22520/5-100	3/16 Inch	
Sa-Y062					_		
5A-Y062 1 NW21 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 2 M7928/1-14 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5CBC001 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch 5CBC002 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch 5CBC002 Load MS25036-149 M22520/5-01 M22520/5-100 3/16 Inch	5A-Y062	1	M7928/1-13	M22520/5-01		3/16 Inch	
SA-Y062 2 M7928/1-14 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-Y062 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch Small Cavity 5CBC001 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch Large Cavity 5CBC002 Line MS25036-156 M22520/5-01 M22520/5-100 5/32 Inch Small Cavity M22520/5-100 9/32 Inch Large Cavity M22520/5-100 9/32 Inch Large Cavity M22520/5-100 3/16 Inch					_		
5A-Y062 2 M7928/1-14 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5CBC001 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch 5CBC002 Line MS25036-156 M22520/5-01 M22520/5-100 5/32 Inch 5CBC002 Load MS25036-149 M22520/5-01 M22520/5-100 3/16 Inch	5A-Y062	1	NW21	M22520/5-01		3/16 Inch	
5A-Y062 2 NW22 M22520/5-01 M22520/5-100 M22520/5-100 Small Cavity 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 M22520/5-100 M22520/5-100 Small Cavity 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 Small Cavity 9/32 Inch M25000 5CBC001 Load MS25036-146 M22520/5-01 M22520/5-100 M22520	5 A V062	1 2	M7029/1 14	M22520/5 01	•	2/16 In ah	
5A-Y062 2 NW22 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5CBC001 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch 5CBC001 Load MS25036-146 M22520/5-01 M22520/5-100 5/32 Inch 5CBC002 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch 5CBC002 Load MS25036-149 M22520/5-01 M22520/5-100 3/16 Inch	3A-1002	2	W1/928/1-14	W122320/3-01		3/10 IIICII	
Small Cavity 5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 Small Cavity M22520/5-100 Small Cavity M22520/5-100 M22520/5-100 M22520/5-100 M22520/5-100 Small Cavity M22520/5-100 M22520/5-100 M22520/5-100 M22520/5-100 M22520/5-100 M22520/5-100 M22520/5-100 Small Cavity M22520/5-100	5A-Y062	2	NW22	M22520/5-01	•	3/16 Inch	
5A-Y062 3 M7928/1-15 M22520/5-01 M22520/5-100 3/16 Inch 5A-Y062 3 NW23 M22520/5-01 M22520/5-100 3/16 Inch 5CBC001 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch 5CBC001 Load MS25036-146 M22520/5-01 M22520/5-100 5/32 Inch 5CBC002 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch 5CBC002 Load MS25036-149 M22520/5-01 M22520/5-100 3/16 Inch	311 1002		111122	10122320/3 01		3/10 men	
5A-Y062 3 NW23 M22520/5-01 Small Cavity 3/16 Inch 5CBC001 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch 5CBC001 Load MS25036-146 M22520/5-01 M22520/5-100 5/32 Inch 5CBC002 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch 5CBC002 Load MS25036-149 M22520/5-01 M22520/5-100 3/16 Inch	5A-Y062	3	M7928/1-15	M22520/5-01	•	3/16 Inch	
5CBC001 Line MS25036-156 M22520/5-01 Small Cavity M22520/5-100 p/32 Inch Large Cavity 5CBC001 Load MS25036-146 M22520/5-01 M22520/5-100 p/32 Inch Small Cavity 5CBC002 Line MS25036-156 M22520/5-01 M22520/5-100 p/32 Inch Large Cavity M22520/5-100 p/32 Inch Large Cavity 5CBC002 Load MS25036-149 M22520/5-01 M22520/5-100 p/32 Inch Large Cavity M22520/5-100 p/32 Inch Large Cavity							
5CBC001 Line MS25036-156 M22520/5-01 M22520/5-100 Large Cavity 9/32 Inch 5CBC001 Load MS25036-146 M22520/5-01 M22520/5-100 Small Cavity 5/32 Inch 5CBC002 Line MS25036-156 M22520/5-01 M22520/5-100 M22520/5-100 M22520/5-100 9/32 Inch 5CBC002 Load MS25036-149 M22520/5-01 M22520/5-100 M22520/5-100 3/16 Inch	5A-Y062	3	NW23	M22520/5-01	M22520/5-100	3/16 Inch	
5CBC001 Load MS25036-146 M22520/5-01 Large Cavity M22520/5-100 5/32 Inch Small Cavity 5CBC002 Line MS25036-156 M22520/5-01 M22520/5-100 Large Cavity 9/32 Inch Large Cavity 5CBC002 Load MS25036-149 M22520/5-01 M22520/5-100 3/16 Inch					_		
5CBC001 Load MS25036-146 M22520/5-01 M22520/5-100 5/32 Inch 5CBC002 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch 5CBC002 Load MS25036-149 M22520/5-01 M22520/5-100 3/16 Inch	5CBC001	Line	MS25036-156	M22520/5-01		9/32 Inch	
5CBC002 Line MS25036-156 M22520/5-01 Small Cavity M22520/5-100 9/32 Inch Large Cavity M22520/5-100 3/16 Inch	*ap ass:		3.500.500.500	1,500,500,500			
5CBC002 Line MS25036-156 M22520/5-01 M22520/5-100 9/32 Inch 5CBC002 Load MS25036-149 M22520/5-01 M22520/5-100 3/16 Inch	5CBC001	Load	MS25036-146	M22520/5-01		5/32 Inch	
5CBC002 Load MS25036-149 M22520/5-01 Large Cavity M22520/5-100 3/16 Inch	5CDC002	T :	MS25026 156	M22520/5 01	•	0/22 In al-	
5CBC002 Load MS25036-149 M22520/5-01 M22520/5-100 3/16 Inch	JCBC002	Line	WIS23U30-130	10122320/3-01		9/32 Inch	
	5CBC002	Load	MS25036-149	M22520/5-01		3/16 Inch	
	3CBC002	Load	111023030-177	14122320/3-01	Small Cavity	5, 10 men	

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
5CBC003	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	Jour
JCBC003	Line	WI323030-130	W122320/3-01	Large Cavity	9/32 men	
5CBC003	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
002000	2000	111020000110	1,12202070 01	Small Cavity	0,02 111011	
5CBC016	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
5CBC023	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
5CBC023	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
5CBC050	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
# GD G0 # 0		3.500.500.514.5	3.500.500.5	Large Cavity		
5CBC050	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
5CBC054	T in a	M925026 156	M22520/5 01	Small Cavity M22520/5-100	9/32 Inch	
3CBC034	Line	MS25036-156	M22520/5-01	Large Cavity	9/32 Inch	
5CBC054	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
JCBC034	Load	WIS25050-140	10122320/3-01	Small Cavity	3/32 men	
5CBC101	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
	2000	1.1326 00 0 1 19	1,12202070 01	Small Cavity	<i>0,</i> 10 men	
5CBC115	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
5CBC148	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	CH
				Small Cavity		
5CBC153	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
5CBC157	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	CE
5CDC157	Tand	MS25026 140	M22520/5 01	Large Cavity	2/1 C In als	DM
5CBC157	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BM
5CBC162	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	AU
JCBC102	Load	WIS25050-147	10122320/3-01	Small Cavity	3/10 men	AU
5CBD044	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
5CBD063	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
5CBD064	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
5CBD065	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
#CDD066		14025026 140	1.622.520/5.01	Small Cavity	0/16 7 1	
5CBD066	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
5S-H005	2	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	AM
55-11003		141023030-102	1 v1 22320/3-01	Small Cavity	J/ TO IIICII	TIVI
5S-H005	3	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	AM
		1.1525556 102	1.122320,3 01	Small Cavity	Z. TO MON	11111
5S-H005	4	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	AM
				Small Cavity		

Table 1. Miscellaneous Terminal Crimping Data (Continued)

					Use
Ref Des Pir	Terminal Part Number	Crimp Tool	Die	Strip Length	On Code
5S-H005 5	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	AM
			Small Cavity		
5S-H005 7	MS25036-145	M22520/5-01	M22520/5-100	5/32 Inch	AM
			Small Cavity		
5S-H005 8	MS25036-145	M22520/5-01	M22520/5-100	5/32 Inch	AM
			Small Cavity		
5S-H005 9	MS25036-145	M22520/5-01	M22520/5-100	5/32 Inch	AM
			Small Cavity		
5S-H005 10	MS25036-145	M22520/5-01	M22520/5-100	5/32 Inch	AM
			Small Cavity		
5S-H005 11	MS25036-145	M22520/5-01	M22520/5-100	5/32 Inch	AM
5TT D010	3.5025026.102	3.500.500.5.01	Small Cavity	2/16 7 1	
5T-B012 G	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	
5T D012	M7020/1 15	M22520/5 01	Small Cavity	2/16 11	
5T-B012 HV	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	
5T-B012 LV	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
J1-D012 LV	W1/920/1-13	10122320/3-01	Small Cavity	3/10 IIICII	
60CBC003 Loa	d MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
Loa Loa	u W1525050-155	W122320/3-01	Small Cavity	3/10 IIICII	
60CBC004 Lin	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
Lin	1,1525050 150	1,122,520,5 01	Large Cavity)/32 Inch	
60CBC004 Loa	d MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
			Small Cavity		
60CBC005 Lin	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
			Large Cavity		
60CBC005 Loa	d MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
			Small Cavity		
60CBC006 Loa	d MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
			Small Cavity		
60CBC020 Lin	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
			Large Cavity		
60CBC020 Loa	d MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
COCD CO21	MG25026 156	N/22520/5 01	Small Cavity	0/22 I 1	
60CBC021 Lin	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
60CBC021 Loa	d MS25036-153	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
1 00CBC021 Loa	u Ni323030-133	10122320/3-01	Small Cavity	3/10 IIICII	
60CBC022 Lin	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
LIII	1/15/25/05/0-15/0	14122320/3-01	Large Cavity	7/32 IIICII	
60CBC022 Loa	d MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
Loa	1.1.2.2.0.0.0 10.0		Small Cavity	3, 10 111011	
60CBC023 Lin	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
			Large Cavity		
60CBC023 Loa	d MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
			Small Cavity		
60CBC025 Loa	d MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
			Small Cavity		

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part	Crimp Tool	Die	Strip Length	Use On
IXCI DG3	' '''	Number	Jimp 1001		Outp Longin	Code
60CBC026	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
60CBC026	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
61CBC048	Load	MS25036-146	M22520/5-01	Small Cavity M22520/5-100	5/32 Inch	
01CBC048	Load	WIS23030-140	W122320/3-01	Small Cavity	3/32 IIICII	
61CBC049	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
010200.9	2040	1/1020000110	1,122020,0001	Small Cavity	o, o 2 mon	
61CBC050	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
61CBC051	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
61 CD C051	T 1	MG25026 140	M22520/5 01	Large Cavity	2/16 1 1	43.6
61CBC051	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AM
61CBC051	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	AL
01CDC031	Load	WIS25050 155	14122320/3 01	Small Cavity	3/10 men	7112
61CBC052	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBC055	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBC056	Load	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
61CBC057	Load	MS25036-153	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
01CBC037	Loau	WIS23030-133	W122320/3-01	Small Cavity	3/10 IIICII	
61CBC058	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBC059	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBC060	Load	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
61CDC061	Tand	MC25026 152	M22520/5 01	Large Cavity M22520/5-100	3/16 Inch	
61CBC061	Load	MS25036-153	M22520/5-01	Small Cavity	3/10 Inch	
61CBC062	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
01020002	2040	1/1020000 100	1,122020,0001	Small Cavity	o, to mon	
61CBC063	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBC064	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
61 CD CO 64	T 1	M925026 156	M22520/5 01	Large Cavity	0/22 I 1	CE
61CBC064	Load	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	CF
61CBC065	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
	Line	1,1525050 150	1,122320,3 01	Large Cavity	7,32 mon	
61CBC065	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBC066	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
61 GD G0 55	, ,))	Large Cavity		
61CBC066	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
		l	l	Small Cavity	1	[

Table 1. Miscellaneous Terminal Crimping Data (Continued)

		Terminal Part				Use
Ref Des	Pin	Number	Crimp Tool	Die	Strip Length	On Code
61CBC091	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AE
				Small Cavity		
61CBC091	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
61CBC092	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
61 CD C002	T 1	M925026 152	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
61CBC092	Load	MS25036-153	W122520/5-01	Small Cavity	3/10 Inch	
61CBC144	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
отеветн	Loud	141525050 155	14122320/3 01	Small Cavity	3/10 men	
61CBC145	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBC154	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
61CBC242	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
61CBC242	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBC243	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
61CBC243	Load	MS25036-149	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
01CBC243	Load	MIS23030-149	W122520/5-01	Small Cavity	3/10 Inch	
61CBD002	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
01CBD002	Line	141525050 150	14122320/3 01	Large Cavity	7/32 men	
61CBD002	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBD003	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBD004	Line	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	BCU
				Small Cavity		
61CBD004	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
61CDD005	T 1	M925026 140	M22520/5 01	Small Cavity	2/16 I 1	
61CBD005	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
61CBD006	Line	MS25036-156	M22520/5-01	Small Cavity M22520/5-100	9/32 Inch	
01CBD000	Line	WIS25050-150	10122320/3-01	Large Cavity	7/32 men	
61CBD006	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBD067	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
61CBD067	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBD068	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AK
61CDD060		MG25025 140	M22520/5 01	Large Cavity	2/16 1	
61CBD068	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
61CBD069	Line	MS25036-156	M22520/5-01	Small Cavity M22520/5-100	9/32 Inch	AK
01000009	Line	141973020-120	14144340/3-01	Large Cavity	9/34 IIICII	AK
I	I	I	1	Large Cavity	[1 1

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
61CBD069	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
61CBD070	Line	MS25036-156	M22520/5-01	Small Cavity M22520/5-100	9/32 Inch	AK
61CBD070	Load	MS25036-149	M22520/5-01	Large Cavity M22520/5-100 Small Cavity	3/16 Inch	
61CBD071	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AK
61CBD071	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD072	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AK
61CBD072	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD073	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AK
61CBD073	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD074	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AK
61CBD074	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD075	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD076	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AK
61CBD076	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD077	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AK
61CBD077	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD078	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AK
61CBD078	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD079	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
61CBD079	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD080	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AK
61CBD080	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD081	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
61CBD081	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
61CBD082	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
61CBD082	Load	MS25036-153	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
61CBD083	Load	MS25036-149	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	AM
61CBD083	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
61CBD084	Line	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BCU
61CBD084	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD087	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD088	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD089	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD090	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
61CBD090	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD130	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD131	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD134	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD135	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
61CBD135	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD136	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	АН
61CBD136	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD146	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AJ
61CBD146	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD149	Line	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AJ
61CBD149	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AJ
61CBD149	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
61CBD156	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Miscellaneous Terminal Crimping Data (Continued)

						Use
Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	On Code
61CBD157	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBD158	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBD159	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
61CBD221	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AJ
				Large Cavity		
61CBD221	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	AB
				Small Cavity		
61CBD221	Load	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AF
610 II100		1605006 100) / (20 5 20 / 5 0 1	Large Cavity	0/161	4.77
61S-H177	2	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	AE
C10 11177		M7029/1 22	M22520/5 01	Small Cavity	2/16 I 1	
61S-H177	2	M7928/1-22	M22520/5-01	M22520/5-100	3/16 Inch	AA
61S-H177	3	MS25036-102	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	AE
013-П1//	3	WIS23030-102	N122320/3-01	Small Cavity	5/10 IIICII	AE
61S-H177	3	M7928/1-22	M22520/5-01	M22520/5-100	3/16 Inch	AA
015-111//	3	W17920/1-22	10122320/3-01	Small Cavity	3/10 men	ЛΛ
62CBC001	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	AL
02020001	Loud	111525050 119	1,122,20,5 01	Small Cavity	S, 10 men	1112
62CBC002	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	AL
				Small Cavity		
62CBC003	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	AL
				Small Cavity		
62CBC004	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AL
				Large Cavity		
62CBC004	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	AL
				Small Cavity		
62CBC005	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	AL
				Small Cavity		
64CBC011	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
64 GD G042		1.500.500.5.1.50		Small Cavity		
64CBC012	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
C4CDC012	Tand	M925026 152	M22520/5 01	Small Cavity	2/1 C I	
64CBC013	Load	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
64CBC016	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	CE
0+CDC010	Line	141323030-130	1V12232U/3-U1	Large Cavity	7/34 IIICII	CE
64CBC016	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	
	Loud	1.11/20/1 7	1,122320,3 01	Small Cavity	5,32 mon	
65CBD024	Line	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	AK
				Small Cavity		
65CBD024	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AK
				Large Cavity		
65CBD024	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		

Table 1. Miscellaneous Terminal Crimping Data (Continued)

					,	Use
Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	On Code
65CBD025	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AJ
65CBD025	Load	MS25036-149	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
03CDD023	Load	W1525050-147	W122320/3-01	Small Cavity	3/10 men	
65S-H027	1	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	
65S-H027	2	M7928/1-13	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
035-11027	2	W17720/1-13	14122320/3-01	Small Cavity	3/10 men	
66CBD002	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AK
CCCDD000	T 1	M925026 146	M22520/5 01	Large Cavity	5/20 I 1	
66CBD002	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
67CBD003	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
68CBC006	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
68CBC006	Load	MS25036-149	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
ООСВСООО	Load	WIS23030-147	14122320/3-01	Small Cavity	3/10 men	
68CBC007	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
68CBC008	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
68CBC009	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
68CBC009	Load	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
68CBD005	Load	MS25036-146	M22520/5-01	Small Cavity M22520/5-100	5/32 Inch	
00CBD003	Load	WI323030-140	W122320/3-01	Small Cavity	3/32 IIICII	
69CBD004	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AK
				Large Cavity		
69CBD004	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
7CBC002	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
7CBC002	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	
7CBC005	Load	MS25036-149	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
/CBC003	Load	WI323030-149	W122320/3-01	Small Cavity	3/10 IIICII	
7CBC012	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
age goes		1.500.500.500.500		Small Cavity	0.4.57	
7CBC029	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
7CBC035	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AL
				Large Cavity		
7CBC035	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	
7DSM007	HV	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
/DSMIOU/	п۷	101/926/1-13	10122320/3-01	Small Cavity	3/10 HICH	
Í	I	I	I	I willing	I	

Table 1. Miscellaneous Terminal Crimping Data (Continued)

		Terminal Part				Use
Ref Des	Pin	Number	Crimp Tool	Die	Strip Length	On Code
7DSM007	GND	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
7DSN008	HV	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	AK
				Small Cavity		
7DSN008	GND	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	AK
				Small Cavity		
7E-A014	PWR	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	
7E-A014	PWR	M7928/1-15	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
/E-A014	PWK	N1/928/1-13	N122320/3-01	Small Cavity	3/10 IIICII	
7E-B016	PWR	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	
/L-D010	1 WK	WIS23030-103	14122320/3-01	Small Cavity	3/10 men	
7E-B016	PWR	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
7E-U018	PWR	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
7E-V020	PWR	M7928/1-15	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
7FLS044	1	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
7FLS044	Load	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
7FI 0046	1	MG25026 102	N/22/22/15 01	Small Cavity	2/16 1	
7FLS046	1	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
7FLS046	Load	MS25036-102	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
/11L3040	Load	WI323030-102	10122320/3-01	Small Cavity	3/10 men	
7FLT045	1	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1,1020 000 102		Small Cavity	<i>6,</i> 10 mm	
7FLT045	Load	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
7FLT047	1	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
7FLT047	Load	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
5 5 11000		3.502.502.5.402	3.500.500.5	Small Cavity	0/4 6 7 1	
7S-H028	2	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
70 11020	3	MS25036-102	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
7S-H028	3	MS25030-102	N122320/3-01	Small Cavity	3/10 Inch	
7T-T039	G	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
71-1037		WIS23030-102	14122320/3-01	Small Cavity	3/10 men	
7T-T039	HV	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
7T-T039	LV	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
7T-T039	GND	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
70CBD006	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AK
				Large Cavity		

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
70CBD006	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	Jour
70000	Load	141525050 140	14122320/3 01	Small Cavity	3/32 men	
71CBD002	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
71CBD003	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
				Small Cavity		
72CBD007	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
5.4 GD G002		3.5702074	3.500.500.5	Small Cavity	7/22 X 1	
74CBC003	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	
74CBC004	Lood	M7928/1-4	M22520/5-01	Small Cavity M22520/5-100	5/32 Inch	
/4CBC004	Load	M1/928/1-4	M122520/5-01	Small Cavity	3/32 Inch	
74CBC005	Load	M7928/1-4	M22520/5-01	M22520/5-100	5/32 Inch	
74606003	Load	1417720/1 4	14122320/3 01	Small Cavity	3/32 men	
74CBC006	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity	7,02 23333	
74CBC006	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
76CBC027	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AA
				Large Cavity		
76CBC027	Line	MS25036-153	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
76CBC027	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
7.CDD01.4	T in a	MC25026 156	M22520/5 01	Small Cavity M22520/5-100	0/20 In als	
76CBD014	Line	MS25036-156	M22520/5-01	Large Cavity	9/32 Inch	
76CBD014	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
7000014	Load	141525050 147	14122320/3 01	Small Cavity	3/10 men	
76CBD015	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
				Large Cavity		
76CBD015	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
76CBD025	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	DHE
				Large Cavity		
76CBD025	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
7.CDD020	T .	MG25026 156	M22520/5 01	Small Cavity	0/20 I 1	A 77
76CBD030	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AK
76CBD030	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
70CDD030	Loau	W1323030-140	W122320/3-01	Small Cavity	3/32 IIICII	
77CBC006	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
., 22 2 3 0 0	2544	1.1525 55 5 1 15		Small Cavity		
78CBC004	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AE
				Small Cavity		
78CBC004	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
78CBC009	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	AE
				Small Cavity		

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
78CBC009	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
79CBD002	Line	MS25036-156	M22520/5-01	Small Cavity M22520/5-100	9/32 Inch	AJ
79CBD002	Load	MS25036-146	M22520/5-01	Large Cavity M22520/5-100	5/32 Inch	
79CBD003	Load	MS25036-146	M22520/5-01	Small Cavity M22520/5-100	5/32 Inch	
79CBD004	Load	MS25036-146	M22520/5-01	Small Cavity M22520/5-100	5/32 Inch	
79CBD005	Line	MS25036-156	M22520/5-01	Small Cavity M22520/5-100 Large Cavity	9/32 Inch	AJ
79CBD005	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
79CBD036	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
79CBD037	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
79CBD038	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
79CBD039	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AL
8CBC105	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AA
8CBC105	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
8CBC106	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
8CBC107	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
8CBC108	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
8CBD003	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
8CBD003	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
8CBD004	Load	M7928/1-4	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
8CBD005	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AJ
8CBD005	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
8CBD046	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
8CBD047	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
8CBD048	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	BCQ

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On
		Number				Code
8CBD048	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
8CBD079	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
obarroso	CMD	N/G2502 < 140	3.500.500.5.01	Small Cavity	2/16 7 1	
8DSH029	GND	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	AA
8DSH029	GND	M7928/1-14	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	AE
8DSH029	GND	N1/928/1-14	W122320/3-01	Small Cavity	3/10 IIICII	AE
8DSH029	PWR	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	
0DS1102)	1 ** 1	W17720/1-13	W122320/3-01	Small Cavity	3/10 men	
8DSH030	GND	M7928/1-41	M22520/5-01	M22520/5-100	3/16 Inch	
02211000	0112	1,1,7,20,1	1/122020/0 01	Small Cavity		
8DSH030	PWR	M7928/1-40	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
8DSH062	PWR	M7928/1-11	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
8DSH063	PWR	M7928/1-11	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
8DSJ017	PWR	M7928/1-11	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
8DSJ019	PWR	M7928/1-11	M22520/5-01	M22520/5-100	3/16 Inch	
0DG1025	DWD	M7020/1 11	M22520/5 01	Small Cavity	2/16 I1	
8DSJ025	PWR	M7928/1-11	M22520/5-01	M22520/5-100	3/16 Inch	
8DSJ028	GND	M7928/1-14	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
6D33028	GND	1017 920/1-14	W122320/3-01	Small Cavity	3/10 men	
8DSJ028	PWR	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	
0250020	1 ,,,,,	10179207113	1,122,520,5 01	Small Cavity	37 TO INCH	
8DSJ053	GND	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
8DSJ053	PWR	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
8DSJ054	PWR	M7928/1-40	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
8DSJ055	PWR	M7928/1-40	M22520/5-01	M22520/5-100	3/16 Inch	
op gross	DILID	3.55020/4.44	3.500.500.5	Small Cavity	0/167	
8DSJ066	PWR	M7928/1-11	M22520/5-01	M22520/5-100	3/16 Inch	
6DC1003	DWD	M7928/1-11	M22520/5 01	Small Cavity	2/16 In ab	
8DSJ092	PWR	M1/928/1-11	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
8DSJ150	GND	MS25036-103	M22520/5-01	M22520/5-100	3/16 Inch	BAM
0203130	GIND	141025050-105	14122320/3-01	Small Cavity	5, 10 men	DIMVI
8DSK114	PWR	M7928/1-11	M22520/5-01	M22520/5-100	3/16 Inch	AA
J= ~ ·				Small Cavity		
8DSK115	PWR	M7928/1-11	M22520/5-01	M22520/5-100	3/16 Inch	AA
				Small Cavity		
8DSK132	PWR	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	AA
				Small Cavity		

Table 1. Miscellaneous Terminal Crimping Data (Continued)

						Use
Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	On Code
8DSK133	PWR	MS25036-102	M22520/5-01	M22520/5-100	3/16 Inch	AA
				Small Cavity		
8DSK134	PWR	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	AA
				Small Cavity		
8DSK155	PWR	M7928/1-11	M22520/5-01	M22520/5-100	3/16 Inch	AA
				Small Cavity		
8DSL117	PWR	M7928/1-11	M22520/5-01	M22520/5-100	3/16 Inch	AA
				Small Cavity		
8DSL131	PWR	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	AA
				Small Cavity		
8DSL135	PWR	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	AA
07.07.404				Small Cavity		l
8DSL136	PWR	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	AA
0DGI 156	CNID	N. 77020/1 1 4	3.500.500.5.01	Small Cavity	2/16 7 1	l l
8DSL156	GND	M7928/1-14	M22520/5-01	M22520/5-100	3/16 Inch	AA
0DCI 156	DWD	M7928/1-13	M22520/5-01	Small Cavity	2/16 In ab	
8DSL156	PWR	M1/928/1-13	M22320/3-01	M22520/5-100 Small Cavity	3/16 Inch	AA
8FLJ070	GND	MS25036-150	M22520/5-01	M22520/5-100	3/16 Inch	
orLJU/U	GND	WI323030-130	W122320/3-01	Small Cavity	3/10 IIICII	
8FLL124	GND	MS25036-150	M22520/5-01	M22520/5-100	3/16 Inch	AA
or LL124	GND	W1525050-150	14122320/3-01	Small Cavity	3/10 men	AA
8J-H015	PWR	MS25036-148	M22520/5-01	M22520/5-100	3/16 Inch	
03 11013	1 ,,,,,	141525050 1 10	14122320/3 01	Small Cavity	3/10 men	
8J-H018	PWR	MS25036-148	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
8J-H026	PWR	MS25036-148	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
8J-H027	PWR	MS25036-148	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
8J-H059	PWR	MS25036-148	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
8J-H060	PWR	MS25036-148	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
8J-H061	PWR	MS25036-148	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
8J-H064	PWR	MS25036-148	M22520/5-01	M22520/5-100	3/16 Inch	
01 110 60	DILID	3.500500c 1.40	3.500.500.5.01	Small Cavity	2/16 7 1	
8J-H068	PWR	MS25036-148	M22520/5-01	M22520/5-100	3/16 Inch	
8J-H071	PWR	MS25036-148	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
ој-по/1	FWK	14023030-140	1V12232U/3-U1	Small Cavity	3/10 IIICII	
8J-H154	PWR	MS25036-148	M22520/5-01	M22520/5-100	3/16 Inch	
0J-11134	1 44 1	141023030-140	1 V1 22320/3-01	Small Cavity	J/ 10 IIICII	
8J-J016	PWR	MS25036-148	M22520/5-01	M22520/5-100	3/16 Inch	
03 3010	1 ,,,,,	1,1023030 170	1,122,320,3 01	Small Cavity	S, 10 men	
8J-J022	PWR	MS25036-148	M22520/5-01	M22520/5-100	3/16 Inch	
				Small Cavity		
I	I	I	ı	1	1	ı I

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
8J-J023	PWR	MS25036-148	M22520/5-01	M22520/5-100	3/16 Inch	
8J-J024	PWR	MS25036-148	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
8J-J065	PWR	MS25036-148	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
8J-K119	PWR	MS25036-148	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
8J-K151	PWR	MS25036-148	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
8J-K160	PWR	MS25036-148	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
8J-K163	PWR	MS25036-148	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AG
8J-L152	PWR	MS25036-148	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
8J-L153	PWR	MS25036-148	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AA
8S-J011	1	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
8S-J011	2	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
8S-J011	4	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
8S-J011	5	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
8S-J011	6	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
8S-J011	7	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
8S-J011	8	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
8S-J011	11	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
8S-J011	12	MS25036-102	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
80CBC004	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
80CBC005	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
80CBC006	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
80CBC010	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
80CBC011	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
80CBC012	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
80CBD007	Load	MS25036-146	M22520/5-01	M22520/5-100	5/32 Inch	
80CBD008	Load	MS25036-146	M22520/5-01	Small Cavity M22520/5-100	5/32 Inch	
80CBD009	Load	MS25036-146	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	5/32 Inch	
82CBD002	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AK
82CBD002	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
82CBD003	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AK
82CBD003	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
82CBD004	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AK
82CBD004	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
82CBD005	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	3/16 Inch	AK
82CBD005	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
83CBC006	Load	M7928/1-4	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
83CBC007	Load	M7928/1-4	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
83CBC008	Load	M7928/1-4	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
83CBD009	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
83CBD010	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
83CBD011	Load	MS25036-146	M22520/5-01	M22520/5-100 Small Cavity	5/32 Inch	
84CBC081	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
84CBC081	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
84CBC082	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	AHI
84CBC083	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	CG
84CBC083	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
84CBC084	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
84CBC084	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
84CBC087	Line	MS25036-156	M22520/5-01	M22520/5-100	9/32 Inch	
84CBC087	Load	MS25036-149	M22520/5-01	Large Cavity M22520/5-100 Small Cavity	3/16 Inch	
84CBC089	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	BCS
84CBC089	Load	MS25036-149	M22520/5-01	M22520/5-100	3/16 Inch	
84CBC090	Line	MS25036-156	M22520/5-01	Small Cavity M22520/5-100	9/32 Inch	
84CBC090	Load	MS25036-149	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
84CBC101	Load	M7928/1-4	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	BBP
84CBD030	Line	MS25036-156	M22520/5-01	Small Cavity M22520/5-100	9/32 Inch	AJ
84CBD030	Load	MS25036-146	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
84CBD080	Line	MS25036-156	M22520/5-01	Small Cavity M22520/5-100	9/32 Inch	BL
84CBD080	Load	MS25036-149	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	BL
84CBD098	Line	MS25036-156	M22520/5-01	Small Cavity M22520/5-100	9/32 Inch	
84CBD098	Load	MS25036-153	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
84CBD099	Load	MS25036-153	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
84CBH008	Line	M7928/1-41	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
84CBH008	Load	M7928/1-41	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
84CBH009	Line	M7928/1-41	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
84CBH009	Load	MS25036-156	M22520/5-01	Small Cavity M22520/5-100	9/32 Inch	
84CBJ010	Line	M7928/1-41	M22520/5-01	Large Cavity M22520/5-100	3/16 Inch	
84CBJ010	Load	M7928/1-41	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
84CBJ011	Line	M7928/1-41	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
84CBJ011	Load	M7928/1-41	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
84S-J022	1	M7928/1-13	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
84S-J022	2	M7928/1-13	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Ref Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
84S-J022	4	M7928/1-13	M22520/5-01	M22520/5-100	3/16 Inch	
84S-J022	5	M7928/1-13	M22520/5-01	Small Cavity M22520/5-100	3/16 Inch	
84S-J022	7	M7928/1-13	M22520/5-01	Small Cavity M22520/5-100 Small Cavity	3/16 Inch	
84S-J022	8	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
84S-J022	10	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
84S-J022	11	M7928/1-13	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
85CBC004	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	AN
85CBC004	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
9CBD002	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	DHF
9CBD002	Line	MS25036-153	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	BCR
9CBD002	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
9CBD004	Line	MS25036-156	M22520/5-01	M22520/5-100 Large Cavity	9/32 Inch	
9CBD004	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	
9CBD006	Load	MS25036-149	M22520/5-01	M22520/5-100 Small Cavity	3/16 Inch	

USE ON CODE(S)

AA F/A-18B.

AB 161353 THRU 161359, F/A-18B 163104 AND UP.

AC 161925 AND UP.

AD 161353 THRU 161924.

AE F/A-18A.

AF F/A-18A 161361 AND UP, F/A-18B 161360 THRU 162885.

AG F/A-18B 161704 AND UP.

AH 161353 THRU 161987.

AI 162394 AND UP.

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Re	f Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
AJ	161360 AN	ND UP.					•
AK	161353 TH	HRU 16135	59.				
AL	161702 AM	ND UP.					
AM	161353 TH	HRU 16152	28.				
AN	F/A-18A 1	.61702 AN	D UP				
AU	161924 AN	ND UP.					
BA	F/A-18B 1	62402 AN	D UP.				
BG	F/A-18A, 1	F/A-18B 1	61354 THRU 161714	1 .			
ВН	F/A-18B 1	61932 AN	D UP.				
BI	F/A-18B 161354 THRU 161924.						
ВЈ	F/A-18B 161360 AND UP.						
вк	F/A-18B 161354 THRU 161357.						
BL	161353 TH	HRU 16151	19.				
ВМ	161520 AN	ND UP.					
BU	163092 AND UP.						
CC	F/A-18A 162394 AND UP.						
CE	161520 TH	HRU 16176	51.				
CF	F/A-18B 1	61719 AN	D UP.				
CG	161360 THRU 161987.						
СН	F/A-18A 161353, F/A-18B 161354 THRU 161357.						
AHI	161353 THRU 161359 BEFORE F18 AFC 8.						
BAM	161353 THRU 161359 AFTER F18 AFC 19.						
BBP	161353 THRU 161987 BEFORE F18 AFC 86.						
BCQ	161353 TF	HRU 16135	59 BEFORE F18 AFO	C			

Table 1. Miscellaneous Terminal Crimping Data (Continued)

Re	ef Des	Pin	Terminal Part Number	Crimp Tool	Die	Strip Length	Use On Code
BCR	161353 TH	HRU 16135	59 AFTER AFC 49.				
BCS	F/A-18A 161702 AND UP, F/A-18B 161704 AND UP; ALSO F/A-18A 161353 THRU 161528, F/A-18B 161354 THRU 161360 AFTER F18 AFC 49.						
ВСТ	F/A-18A 1	.61353 TH	RU 161528, F/A-18B	3 161354 THRU 1613	360 BEFORE F18 A	FC 49.	
BCU	F/A-18A 1	.61361 TH	RU 161528 AND F/A	A-18B 161360 AFTE	R F18 AFC 49.		
BEV	161353 TH	HRU 16198	37 BEFORE F18 AFO	C 48.			
BGL	162394 AN	ND UP, AL	SO 161353 THRU 1	61987 AFTER F18 A	AFC 48.		
CFC	F/A-18B 1	61354 TH	RU 161924 AFTER I	F18 AFC 52.			
CFF	F/A-18B 1	61354 TH	RU 161924 BEFORE	EF18 AFC 52.			
CFI	161353 TH	HRU 16192	24 BEFORE F18 AFO	C 52.			
DGO	161353 TH	HRU 16198	87; ALSO F/A-18A 1	62394 THRU 16314	4, F/A-18B 162402 A	AND UP AFTER AF	C 93.
DGP	163119 AN	ND UP, AL	SO 161353 THRU 1	63118 AFTER F18 A	AFC 90.		
DGQ	F/A-18B 1	62402 AN	D UP; ALSO F/A-18	B 161353 THRU 16	1987 AFTER F18 A	FC 48.	
DGR	F/A-18A 1	62394 AN	D UP; ALSO F/A-18	SA 161353 THRU 16	1987 AFTER F18 A	FC 48.	
DHA	161925 AN	ND UP; AI	LSO 161353 THRU 1	61924 AFTER F18 A	AFC 52.		
DHB	F/A-18B 1	61932 AN	D UP, ALSO F/A-18	B 161354 THRU 161	1924 AFTER F18 AI	FC 52.	
DHC	F/A-18B 1	61932 AN	D UP, ALSO F/A-18	B 161354 THRU 161	1924 BEFORE F18 <i>F</i>	AFC 52.	
DHD	161520 AN	ND UP, AL	SO 161353 THRU 1	61519 AFTER F18 A	AFC 39.		
вне	161353 TH	HRU 16135	59, 161702 AND UP;	ALSO 161360 THR	U 161528 AFTER F	18 AFC 49.	
BHF	161360 AN	ND UP, AL	SO 161353 THRU 1	261359 AFTER F18	AFC 49.		

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

SOLDER SLEEVE INSTALLATION

Reference Material

Electrical System	C-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	WRM-000
Wire Type List	WP004 00

Alphabetical Index

Subject	Page No.
Centering Solder Sleeve, Figure 7	7
Comb Out Braided Shield, Figure 6	6
Combing Out Braided Shield, Figure 2	3
Completed Splice, figure 4	5
Cutting and Striping Coaxial Cable and Shielding Jumper Wires, Figure 5	6
Installation of Solder Sleeve to Coaxial Wire	6
Installation of Solder Sleeve to Shielded Wire	2
Installing Solder Sleeve, Figure 3	4
Installing Solder Sleeve, Figure 9	8
Introduction	1
Materials Required	2
Support Equipment Required	2
Procedure	2.
Shielded Wire Solder Sleeve, Table 1	3
Shrink Solder Sleeve, Figure 8	7
Shrink Solder Sleeve, Figure 10	, Q
Stripping Cable and Shielding Jumper Wire. Figure 1	2

Record of Applicable Technical Directives

None

1. INTRODUCTION.

2. This work package provides general procedures for the installation of solder sleeves onto both shielded and coaxial wire.

Support Equipment Required

Nomenclature
Repair Set - Wire and Connector
Heating Tool
Nitrogen Servicing Unit - NAN-3

Materials Required

nclature
ng Jumper Wire
Sleeve
Sleeve
Sleeve
ľ

NOTE

Size required to be determined by technician.

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

a. Refer to paragraph 4 for installation of solder sleeves to shielded wire or to paragraph 5 for installation of solder sleeves to coaxial wire.

4. INSTALLATION OF SOLDER SLEEVE TO SHIELDED WIRE.

NOTE

Identify applicable cable/wiring assembly in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070, then refer to Wire Type List (WP004 00) for correct wire stripper.

a. Using wire stripper identified in WP004 00, strip cable and shielding jumper wire as shown below. See figure 1.

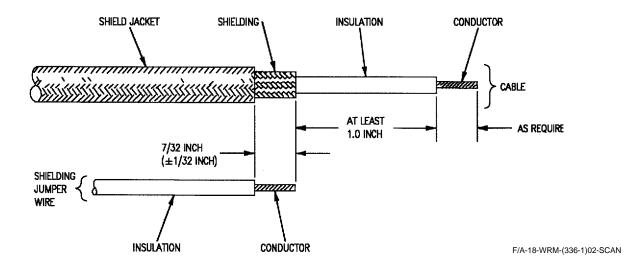
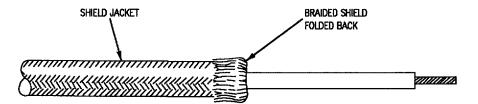


Figure 1. Stripping Cable and Shielding Jumper Wire

b. Comb out braided shield and fold back over shield jacket. See figure 2.

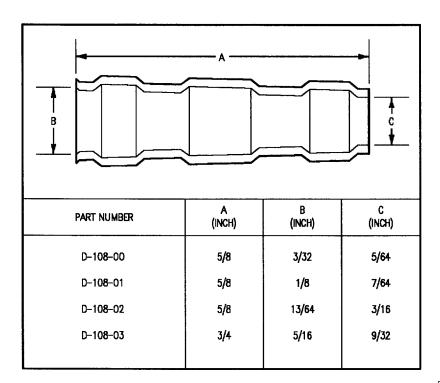


F/A-18-WRM-(336-2)02-SCAN

Figure 2. Combing Out Braided Shield

c. Determine correct size of solder sleeve required. Refer to table 1.

Table 1. Shielded Wire Solder Sleeve



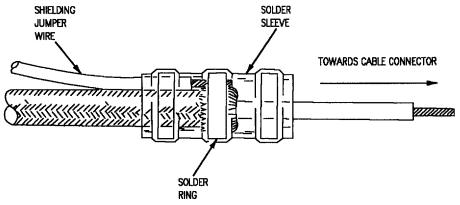
F/A-18-WRM-(1101-1)02-CATI

d. Position shielding jumper wire parallel to and in contact with cable shielding.

NOTE

Make sure that cable shield strands and shielding jumper wire conductor are smooth and flat.

e. With narrow end of solder sleeve toward cable connector, install solder sleeve over shielding jumper wire and cable shielding so that solder ring is centered over exposed shielding. See figure 3.



F/A-18-WRM-(336-3)02-SCAN

Figure 3. Installing Solder Sleeve

WARNING

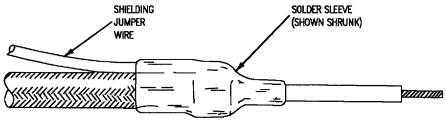
To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with the heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

NOTE

Complete melting of solder ring is accomplished when soldering ring color changes from dull gray to bright silver, 10 to 30 seconds after initial heat application.

f. Using heat tool, melt solder ring and shrink solder sleeve so that completed splice appears as below. See figure 4.



F/A-18-WRM-(336-4)02-SCAN

Figure 4. Completed Splice

5. INSTALLATION OF SOLDER SLEEVE TO COAXIAL WIRE.

CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

a. Cut shielding jumper wires (M22759/11-22-5) to length required.

NOTE

Identify applicable cable/wiring assembly in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070, then refer to Wire Type List (WP004 00) for correct wire stripper.

b. Using wire stripper identified in WP004, strip coaxial cable and shielding jumper wires as shown below. See figure 5.

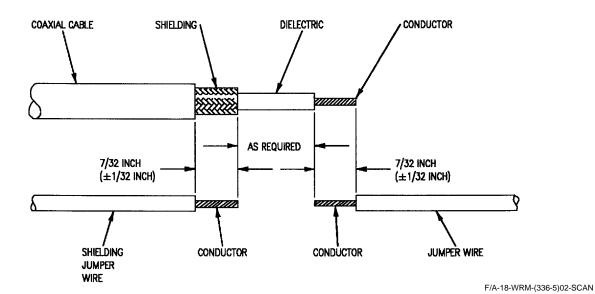
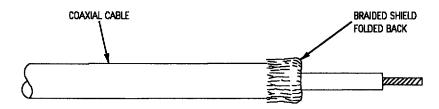


Figure 5. Cutting and Stripping Coaxial Cable and Shielding Jumper wires

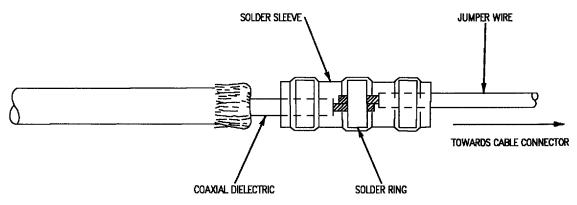
c. Comb out braided shield and fold back over wire jacket. See figure 6.



F/A-18-WRM-(336-6)02-SCAN

Figure 6. Comb Out Braided Shield

- d. Position solder sleeve (D100-28) over coaxial cable so that sealing ring is toward cable connector and solder ring is centered over conductor.
- e. Insert shielding jumper wire (M22759/11-22-5) into solder sleeve so that conductors overlap but do not touch coaxial dielectrics. See figure 7.



F/A-18-WRM-(336-7)02-SCAN

Figure 7. Centering Solder Sleeve

WARNING

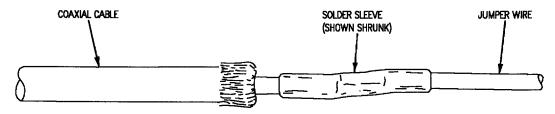
To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with the heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

NOTE

Complete melting of solder ring is accomplished when solder ring color changes from dull gray to bright silver, 10 to 30 seconds after initial heat application.

f. Using heat tool, melt solder ring and shrink solder sleeve so that completed splice appears as below. See figure 8.



F/A-18-WRM-(336-8)02-SCAN

Figure 8. Shrink Solder Sleeve

- g. Fold combed out braided shield over shrunk solder sleeve (D100-28).
- h. Position shielding jumper wire (M22759111-22-5) parallel to and in contact with coaxial shielding.

NOTE

Make sure that coaxial shield strands and shielding jumper wire conductors are smooth and flat.

i. With wide end of solder sleeve (D101-22) toward cable connector, install solder sleeve over shielding jumper wire and coaxial shielding so that solder ring is centered over exposed shielding. See figure 9.

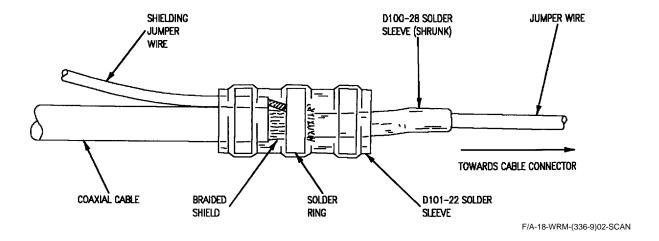


Figure 9. Installing Solder Sleeve

WARNING

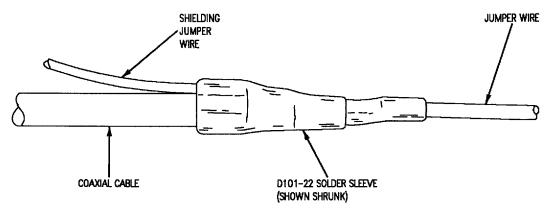
To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with the heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

NOTE

Complete melting of solder ring is accomplished when solder ring color changes from dull gray to bright silver, 10 to 30 seconds after initial heat application.

j. Using heat tool, melt solder ring and shrink solder sleeve so that completed splice appears as below. See figure 10.



F/A-18-WRM-(336-10)02-SCAN

Figure 10. Shrink Solder Sleeve

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

SHIELDED TERMINAL FERRULE (HIGH TEMPERATURE)

Reference Material

Electrical System A1-F18A	AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	-WRM-000
Wire Type List	WP004 00

Alphabetical Index

Subject	Page No.
Crimping Cable and Shielding Termination Ferrule Assembly, Figure 3	5
Ferrule and Die Set Combinations, Table 1	
Introduction	1
Materials Required	2
Support Equipment Required	1
Installing Shielding Termination Ferrule, Figure 2	4
Procedure	2
Shrink Insulation Sleeving, Figure 5	6
Sliding Insulation Sleeving, Figure 4	5
Strip Cable and Shielding Jumper Wire, Figure 1	3

Record of Applicable Technical Directives

None

1. INTRODUCTION.

Support Equipment Required

2. This work package provides general procedures for
the installation of shielded terminal ferrules on shielded
terminal ferrules on shielded cable.

Part Number or Type Designation	Nomenclature
3308AS100	Repair Set-Wire and Connector
HT-900	Heat Tool
1317AS100-1	Nitrogen Servicing Unit - NAN-3
59500	AMP Crimping Tool

Materials Required

Specification or Part Number	Nomenclature
M22795/11-22-5	Shielding Jumper
M23053/12 XX-0	Insulation Sleeving
3280XX	Shielding Termination Ferrule
1 5M608-XX	Shielding Termination Ferrule
	NOTE
Size require technician.	ed to be determined by

3. PROCEDURE.

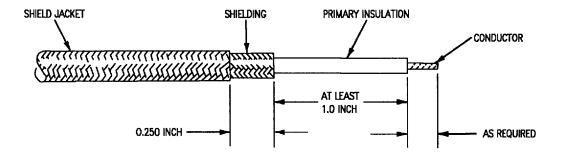


To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

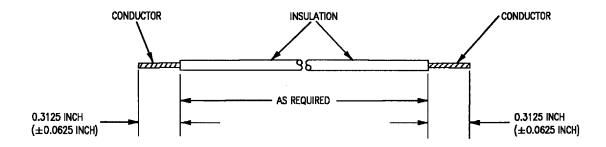
NOTE

Identify applicable cable/wiring assembly in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070, then refer to Wire Type List (WP004 00) for correct wire strippers.

a. Using wire strippers identified in WP004 00, strip cable and shielding jumper wire as shown below. See figure 1.



CABLE DIMENSIONS



SHIELDING JUMPER DIMENSIONS

F/A-18-WRM-(276-1)02-SCAN

Figure 1. Strip Cable and Shielding Jumper Wire

b. Determine ferrule and die set required. Refer to table 1.

FERRULE PART NUMBER	INSULATION DIAMATER (INCH)	DIE SET PART NUMBER	DIE SET COLOR CODE
5M608-12 or 328051	0.025 THRU 0.045	45061-2	WHITE
5M608-13 or 328052	0.045 THRU 0.065	45062-2	VIOLET
5M608-14 or 328053	0.065 THRU 0.085	45063-2	BLUE
5M608-15 or 328054	0.085 THRU 0.105	45064-2	BROWN
5M608-16 or 328055	0.105 THRU 0.125	45065-2	ORANGE
5M608-17 or 328056	0.125 THRU 0.145	45066-2	GREEN
5M608-18 or 328057	0.145 THRU 0.170	45238-2	VIOLET
5M608-19 or 328058	0.170 THRU 0.195	45239-2	BLUE
5M608-20 or 328059	0.195 THRU 0.220	45240-2	BROWN
5M608-21 or 328060	0.220 THRU 0.245	45241-2	ORANGE
5M608-22 or 328061	0.245 THRU 0.270	45158-2	GREEN

Table 1. Ferrule and Die Set Combinations

- c. Install shielding termination ferrule onto cable and shielding.
- d. Insert shielding jumper wire into shielding termination ferrule so that end of jumper wire is visible through inspection hole of ferrule.

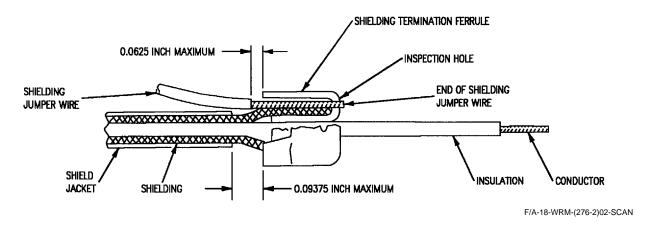


Figure 2. Installing Shielding Termination Ferrule

e. Using 59500 AMP crimping tool and die set required by table 1, crimp cable and shielding termination ferrule assembly.

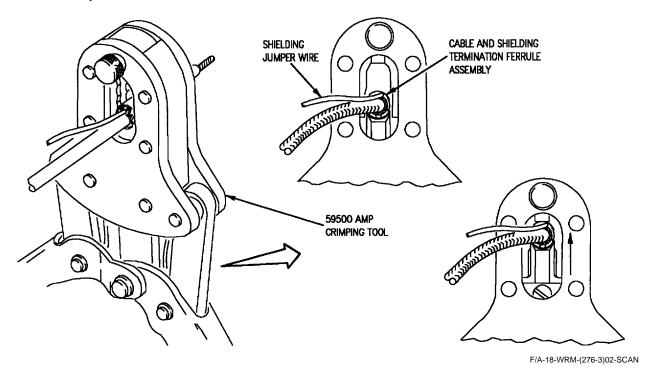
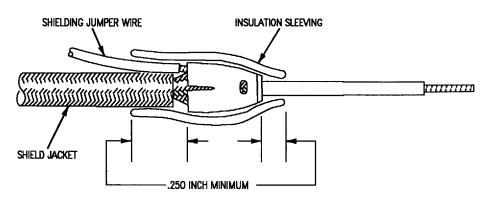


Figure 3. Crimping Cable and Shielding Termination Ferrule Assembly

f. Slide insulation sleeving over shielding termination ferrule assembly, making sure that ends of insulation sleeving extend at least 1/4-inch past ends of shielding termination ferrule.



F/A-18-WRM-(276-4)02-SCAN

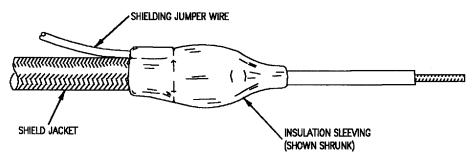
Figure 4. Sliding Insulation Sleeving

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

g. Shrink insulation sleeving using heat tool.



F/A-18-WRM-(276-5)02-SCAN

Figure 5. Shrink Insulation Sleeving

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

PREWIRED COMPONENTS

Reference Material

Electrical System A1-F18	AC-420-300
Utility Battery and Charger Unit or Utility Battery	. WP019 00
Emergency Battery and Charger Unit or Emergency Battery	. WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	C-WRM-000
Wire Type List	. WP004 00

Alphabetical Index

Subject	Page No.
Centering Seling Sleeve, Figure 4	4
Crimp Splices, Table 1	2
Crimping Crimp Barrel and Conductor, Figure 3	3
Heating Sealing Sleeve, Figure 5	4
Installing Sealing Sleeve and Crimp Barrel, Figure 2	3
Introduction	1
Materials Required	2
Support Equipment Required	1
Procedure	2
Strip Prewired Component Wiring and Aircraft Wiring, Figure 1	2

Record of Applicable Technical Directives

None

1. INTRODUCTION.

2. This work package provides general procedures for splicing of prewired components to aircraft wiring. A prewired component comes with wires already attached (prewired). These wires must then be spliced to existing aircraft wiring.

Support Equipment Required

Part Number or Type Designation	Nomenclature
3308AS100	Repair Set - Wire and Connector
HT-900	Heat Tool
1317AS100-1	Nitrogen Servicing
	Unit - NAN-3

Specification

Materials Required

3. PROCEDURE.

or Part Number	Nomenclature
1 M81824/1-X	Splice, Conductor
D-436-36	Splice, Conductor
	(Red)
D-436-37	Splice, Conductor
	(Blue)
D-436-38	Splice, Conductor
	(Yellow)

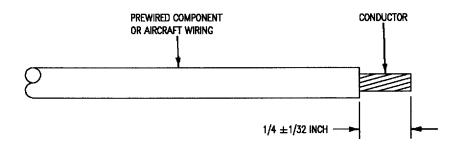
CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

NOTE

Identify applicable wiring assembly in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070, then refer to Wire Type List (WP004 00) for correct wire strippers.

a. Using wire strippers identified in WP004 00, strip prewired component wiring and aircraft wiring as shown below. See figure 1.



F/A-18-WRM-(278-1)02-SCAN

Figure 1. Strip Prewired Component Wiring and Aircraft Wiring

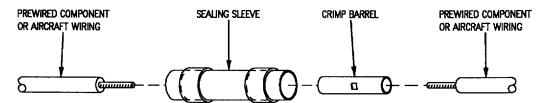
b. Determine crimp splice required. Refer to table

1.

Table 1. Crimp Splices

CRIMP SPLICE PART NUMBER	COLOR CODE	WIRE SIZE AWG
M81824/1-1	RED	20, 22, 24
M81824/1-2	BLUE	16, 18, 20
M81824/1-3	YELLOW	12, 14, 16

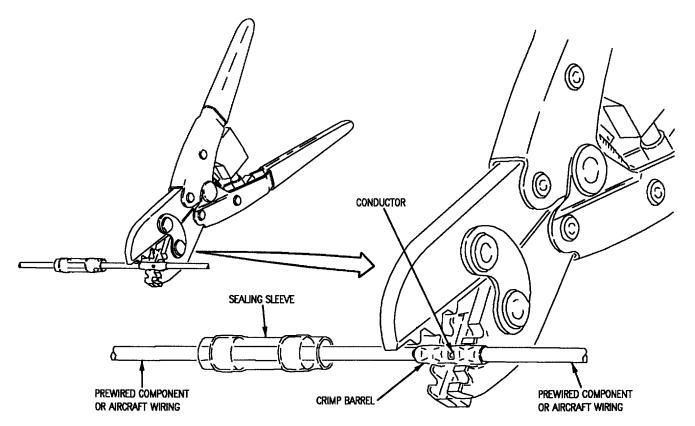
- c. Slide sealing sleeve over one end of prewired component wiring or aircraft wiring.
- d. Install crimp barrel on end of wire. See figure 2.



F/A-18-WRM-(278-2)02-CATI

Figure 2. Installing Sealing Sleeve and Crimp Barrel

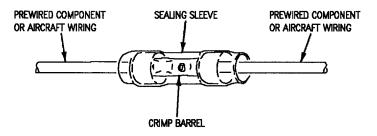
- e. Make sure conductor is visible in center of crimp barrel and crimp wire using GMT 232 crimping tool supplied with wire and connector repair set.
- f. Insert conductor of other wire into open end of crimp barrel and crimp using GMT 232 crimping tool. See figure 3.



F/A-18-WRM-(278-3)02-SCAN

Figure 3. Crimping Crimp Barrel and Conductor

g. Center sealing sleeve over crimp barrel. See figure 4.



F/A-18-WRM-(278-4)02-SCAN

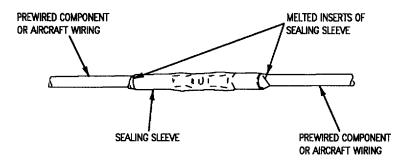
Figure 4. Centering Sealing Sleeve

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

h. Using heat tool, apply heat starting at one end of sealing sleeve until melted insert flows from end of sleeve then moves along sleeve until insert at opposite end of sleeve melts and flows along wire. See figure 5.



F/A-18-WRM-(278-5)02-SCAN

Figure 5. Heating Sealing Sleeve

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

REPAIR OF SILICONE RUBBER TAPE BOOTS

Reference Material

Wiring Repair With Parts Data, General Wiring Repair Procedures	C-WRM-000
Repair of Multi Conductor Shielded Wire	WP030 00
Repair of Single Conductor Non-Shielded Wire	WP026 00
Repair of Single Conductor Shielded Wire	WP028 00
Repair of Shielded/Non-Shielded Braided Wiring Harness	WP032 00
Shielded Cable Splice Terminations	WP031 00

Alphabetical Index

Subject	Page No
Description	1
Materials Required	1
Procedure	2
Repair of Silicone Rubber Tape Boot, Figure 1	2
Silicone Rubber Tape, Table 1	2
Support Equipment Required	1

Record of Applicable Technical Directives

None

1. **DESCRIPTION.**2. This work package explains the procedure for the repair of silicone rubber tape boots. Materials Required Specification or Part Number Nomenclature

Support Equipment Required

None

or Part Number	Nomenciature
MIL-T-43435TYPE-2,	Tape, Lacing
SIZE-3FINISH-C	
MIL-I-46852,TYPE-2	Tape, Insulation
1.000IN.BLK	

3. **PROCEDURE.** See figure 1.



Use extreme caution when removing silicone rubber tape boots to prevent wire damage.

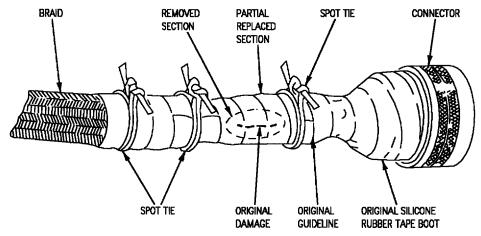
- a. If required, remove spot tie.
- b. Remove all or partial section of silicone rubber tape boot as required around damaged area with diagonal cutting pliers.
 - c. Inspect for wire damage.
- d. If damaged wires are found, remove additional silicone rubber tape boot as required to make a more thorough inspection.

- e. Repair damaged wires as required as shown in WP026 00 through WP032 00.
- f. Reinstall complete new silicone rubber tape boot.

NOTE

Maintain a 50 percent overlap.

- g. If no wire damage is found and partial boot replacement is required, rewrap exposed area using silicone rubber tape (table 1) overlapping exposed area at least one-half of tape width. Follow original guideline while wrapping.
 - h. Spot tie tape ends with lacing tape.



F/A-18-WRM-(676-1)02-SCAN

Figure 1. Repair of Silicone Rubber Tape Boot

Table 1. Silicone Rubber Tape

PART NUMBER	CAGE	WIDTH (INCH)
MIL-I-46852, TYPE 2, 1.000INBLK	81349	1.000

SELF - BONDING TAPE COMES IN ROLLS

COLOR - BLACK

TEMPERATURE RANGE: -178° TO +500°F

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

FABRICATION OF SHIELDED HARNESS TERMINATED WITH ELECTROMAGNETIC INTERFERENCE (EMI) BACKSHELLS

Reference Material

Electrical System A1-F18A	.C-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00

Alphabetical Index

Subject	Page No.
Adapter Tool Mating, Figure 2	7
Adapter/Backshell Removal, Figure 14	15
CM Adapter Tool Part Numbering System, Figure 1	7
CM Adapter Tools	6
Description	5
Disassembly Procedure	12
Ferrule/Cable Clamp Installation, Figure 20	20
Ferrule/Cable Clamp Removal, Figure 10	13
G7056 and G7925 EMI Backshells, Figure 25	26
G7057 EMI Backshell, Figure 26	29
G7173 and S2127 EMI Backshells, Figure 27	32
G8682 EMI Adapter, Figure 28	33
Installation of Adapter Backshell, Figure 15	16
Insulation Tape, Table 1	16
J1311F EMI Adapter, Figure 29	34
J1317 EMI Adapter, Figure 30	36
Loosening Position of Wrench, Figure 5	10
Materials Required	6
Plastic Tiedown Strap Removal, Figure 9	13
Plastic Tiedown Strap, Table 4	21
Procedure	6
Reassembly of J1317 EMI Adapter, Figure 24	25
Reassembly of J1317 EMI Adapter	24
Reassembly Procedure	16
Reference Designation to Figure Number Index	2
Removal	22
Removal of J1317 EMI Adapter	22
Removal of J1317 EMI Adapter, Figure 23	23
Securing Ferrule/Cable Clamp, Figure 21	21
Securing Silicone Rubber Tape Boot, Figure 22	22

Alphabetical Index (Continued)

Subject	Page No
Securing Wire Mesh Tape Wrap, Figure 19	19
Silicone Rubber Tape Buildup, Figure 17	18
Silicone Rubber Tape Boot Removal, Figure 8	12
Soldering Wire Mesh Tape to Shield, Figure 18	19
Spiral Wrapping Teflon Barrier Tape, Figure 16	17
Spot Tie Removal, Figure 7	12
Strap Wrench	8
Strap Wrench Setup And Adjustment, Figure 3	8
Support Equipment Required	6
Teflon Barrier Tape, Table 2	17
Teflon Barrier Tape Removal at Backshell, Figure 11	14
Teflon Barrier Tape Removal, Figure 13	15
Tie Wrap Tool	11
Tie Wrap Tool, Figure 6	11
Tightening Position of Wrench, Figure 4	9
Wire Mesh Tape Removal, Figure 12	14
Wire Mesh Tape, Table 3	18

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 19	-	Addition of a Second Shoot Light Power Supply Connector (WUC 44314)	1 Oct 93	-
F/A-18 AFC 26	31 Jan 90	Air Turbine Starter System/Airframe Mounted Accessory Drive (AMAD), Modification of	1 Oct 93	-
F/A-18 AFC 54	-	Video Recorder Set, Incorporation of	1 Oct 93	-
F/A-18 AFC 74	-	Installation of Aircraft Wiring Provisions for Additional Weapons Capability (ECP MDA-F/A-18-2120 PT2)	1 Dec 87	-

Reference Designation to Figure Number Index

Reference		Reference	
Designation	Figure No.	Designation	Figure No.
10P-F015	25	12P-G005	25
2 10P-G009	25	12P-G007	25
1 10P-G009	26	12P-G029	26
10P-G017	26	17 12P-G060	26
12J-G029	26	17 12P-G061	26
17 12J-G060	26	12P-R006	25
17 12J-G061	26	13P-G008	25

Reference Designation to Figure Number Index (Continued)

Reference		Reference	
Designation	Figure No.	Designation	Figure No.
13P-P006	26	19 52J-F002A (Adapter)	29
13P-R005	26	19 52J-F002B	29
18P-S003	25	19 52J-F004A	29
18 18P-T014	25	19 52J-F004B	29
10 19J-S013	26	19 52J-F005A	29
5 19P-S013	26	19 52J-F005B	29
6 19P-S013	25	52J-J156	25
19P-T009	26	52J-L050	26
19P-T012	25	19 52J-L154	25
20 20P-E012	25	24 52J-P009A (Adapter)	29
20P-J003	26	24 52J-P009B (Adapter)	29
19 20P-K006	25	20 52J-P010A (Adapter)	29
20 20P-L013	25	20 52J-P010B (Adapter)	29
20 20P-L014	25	52J-P157	26
22P-E003	25	20 52J-R002A (Adapter)	29
22P-E007	26	20 52J-R002B (Adapter)	29
22P-E010	26	20 52J-R004A (Adapter)	29
22P-G056	25	20 52J-R004B (Adapter)	29
22P-G073	25	20 52J-R005A (Adapter)	29
22P-G108	25	20 52J-R005B (Adapter)	29
21 22P-G172	25	52J-R158	26
22P-M008	26	52J-U150	25
22P-M009	25	52J-U152	26
24P-P011	25	52J-V151	25
3J-M028	26	52J-V153	26
3J-N033	26	52P-B021	25
22 3P-P095	25	4 52P-E009A (Adapter)	29
16 3P-R096	25	4 52P-E009B (Adapter)	29
12 3P-R096	26	52P-E010A (Adapter)	29
34P-G003	25	<u>52P-E</u> 010B (Adapter)	29
13 34P-P004	25	20 52P-E154	25
4P-R023	25	52P-F002A (Adapter)	29
5J-R135	25	52P-F002B (Adapter)	29
5P-B006	26	52P-F004A (Adapter)	29
5P-B007	25	52P-F004B (Adapter)	29
5P-P072	25	52P-F005A (Adapter)	29
5P-P145	25	52P-F005B (Adapter)	29
5P-P151	25	52P-G022	25
26 5P-P152	25	52P-G051	25
27 5P-P152	26	52P-L050	25
5P-R070	25	52P-L050 (Adapter)	28
5P-R144	25	52P-P035	26
5P-Y025	28	52P-P064A	26
23 52J-E009A (Adapter)	29	52P-P064B	26
23 52J-E009B (Adapter)	29	52P-P110	25
19 52J-E010A (Adapter)	29	52P-P111	26
19 52J-E010B (Adapter)	29	52P-P117	26

Reference Designation to Figure Number Index (Continued)

52P-P123 26 61P-W213 27 52P-P125 25 61P-W239 26 52P-R036 26 61P-W258 26 52P-R066A 26 61P-Y100A 26 52P-R066B 26 61P-Y112 26 52P-R113 26 61P-Y205 25 52P-R114 26 61P-Y247A 27 52P-R116 26 61P-Y287 26 52P-R124 25 61P-Z105A 26 52P-U150 26 61P-Z167 26 52P-U152 26 7J-U042 25 52P-V151 26 7J-V043 25 52P-V153 26 7P-G026 25 52P-V153 26 7P-S036B 26 61J-J033 25 7P-S036C 26 61J-U045 26 7P-S037 26	Figure No.
52P-R036 26 61P-W258 26 52P-R066A 26 61P-Y100A 26 52P-R066B 26 61P-Y112 26 52P-R113 26 61P-Y205 25 52P-R114 26 61P-Y247A 27 52P-R116 26 61P-Y287 26 52P-R124 25 61P-Z105A 26 52P-U150 26 61P-Z167 26 52P-U152 26 7J-U042 25 52P-V151 26 7J-V043 25 52P-V153 26 7P-G026 25 19 61J-F034 26 7P-S036B 26 61J-J033 25 7P-S036C 26	27
52P-R066A 26 61P-Y100A 26 52P-R066B 26 61P-Y112 26 52P-R113 26 61P-Y205 25 52P-R114 26 61P-Y247A 27 52P-R116 26 61P-Y287 26 52P-R124 25 61P-Z105A 26 52P-U150 26 61P-Z167 26 52P-U152 26 7J-U042 25 52P-V151 26 7J-V043 25 52P-V153 26 7P-G026 25 19 61J-F034 26 7P-S036B 26 61J-J033 25 7P-S036C 26	26
52P-R066B 26 61P-Y112 26 52P-R113 26 61P-Y205 25 52P-R114 26 61P-Y247A 27 52P-R116 26 61P-Y287 26 52P-R124 25 61P-Z105A 26 52P-U150 26 61P-Z167 26 52P-U152 26 7J-U042 25 52P-V151 26 7J-V043 25 52P-V153 26 7P-G026 25 19 61J-F034 26 7P-S036B 26 61J-J033 25 7P-S036C 26	26
52P-R113 26 61P-Y205 25 52P-R114 26 61P-Y247A 27 52P-R116 26 61P-Y287 26 52P-R124 25 61P-Z105A 26 52P-U150 26 61P-Z167 26 52P-U152 26 7J-U042 25 52P-V151 26 7J-V043 25 52P-V153 26 7P-G026 25 19 61J-F034 26 7P-S036B 26 61J-J033 25 7P-S036C 26	26
52P-R113 26 61P-Y205 25 52P-R114 26 61P-Y247A 27 52P-R116 26 61P-Y287 26 52P-R124 25 61P-Z105A 26 52P-U150 26 61P-Z167 26 52P-U152 26 7J-U042 25 52P-V151 26 7J-V043 25 52P-V153 26 7P-G026 25 19 61J-F034 26 7P-S036B 26 61J-J033 25 7P-S036C 26	26
52P-R114 26 61P-Y247A 27 52P-R116 26 61P-Y287 26 52P-R124 25 61P-Z105A 26 52P-U150 26 61P-Z167 26 52P-U152 26 7J-U042 25 52P-V151 26 7J-V043 25 52P-V153 26 7P-G026 25 19 61J-F034 26 7P-S036B 26 61J-J033 25 7P-S036C 26	25
52P-R116 26 61P-Y287 26 52P-R124 25 61P-Z105A 26 52P-U150 26 61P-Z167 26 52P-U152 26 7J-U042 25 52P-V151 26 7J-V043 25 52P-V153 26 7P-G026 25 19 61J-F034 26 7P-S036B 26 61J-J033 25 7P-S036C 26	
52P-R124 25 61P-Z105A 26 52P-U150 26 61P-Z167 26 52P-U152 26 7J-U042 25 52P-V151 26 7J-V043 25 52P-V153 26 7P-G026 25 19 61J-F034 26 7P-S036B 26 61J-J033 25 7P-S036C 26	26
52P-U150 26 61P-Z167 26 52P-U152 26 7J-U042 25 52P-V151 26 7J-V043 25 52P-V153 26 7P-G026 25 19 61J-F034 26 7P-S036B 26 61J-J033 25 7P-S036C 26	26
52P-V151 26 7J-V043 25 52P-V153 26 7P-G026 25 19 61J-F034 26 7P-S036B 26 61J-J033 25 7P-S036C 26	26
52P-V151 26 7J-V043 25 52P-V153 26 7P-G026 25 19 61J-F034 26 7P-S036B 26 61J-J033 25 7P-S036C 26	
19 61J-F034 26 7P-S036B 26 61J-J033 25 7P-S036C 26	
19 61J-F034 26 7P-S036B 26 61J-J033 25 7P-S036C 26	25
61J-J033 25 7P-S036C 26	26
	26
013-00 1 3	26
61J-V046 26 7P-S048 25	
61J-W024 26 7P-T038 26	
61J-W093 26 75J-N001 26	26
61J-W112 26 76J-J003 26	26
61J-W210 26 76P-B003 25	25
61J-W239 26 76P-B023A 25	25
25 61J-Y200A 26 76P-H009D 25	25
25 61J-Y200B 26 14 79P-E023 26	26
25 61J-Y206 25 79P-J001A 26	26
20 61P-F034 26 79P-J001A (Adapter) 30	30
61P-G165 26 79P-J001B 26	26
61P-P014A 25 79P-J001B (Adapter) 30	30
61P-P014B 25 8 79P-L023 25	25
61P-P014C 25 <u>3</u> 79P-L023 26	26
61P-R016A 25 <u>15</u> 8P-L080 25	25
61P-R016B 25 7 8P-L080B 25	
61P-R016C 25 80P-H001A 25	25
61P-U011A 26 80P-H001A (Adapter) 30	30
61P-U011B 26 80P-J002A 25	25
61P-V019A 26 80P-J002A (Adapter) 30	30
61P-V019B 26 80P-J003A 25	
61P-W012A 26 80P-J003A (Adapter) 30	30
61P-W012C 26 80P-J003B 25	25
61P-W012D 26 <u>80P-J003B</u> (Adapter) 30	30
61P-W023A 26 <u>20</u> 80P-K019A 25	
61P-W023B 26 20 80P-K019A (Adapter) 30	30
61P-W023C 26 <u>80P-K023</u> 25	
61P-W097A 26 20 80P-L016A 26	
28 61P-W212 26 20 80P-L016A (Adapter) 30	
29 61P-W212 27 20 80P-L016B (Adapter) 30	
28 61P-W213 26 20 80P-L017A 25	25

Reference Designation to Figure Number Index (Continued)

Reference Designation	Figure No.	Reference Designation	Figure No.
20 80P-L017A (Adapter)	30	6 161745 AND UP	
82P-F001B	25	161360 AND UP; ALSO 161353 T	HRII
83J-G003	26	161359 AFTER F18 AFC 19.	inco
84P-F001C	25	8 F/A-18A 161741 AND UP, ALSO	
84P-F001E	25	F/A-18A 161353 THRU 161528 AI	FTFR
84P-F001K	25	F18 AFC 54	ILK
84P-F001M	25	9 161353 THRU 161719	
84P-F002C	25	10 161522 AND UP	
84P-F002E	25	101322 AND 01 11 161353 THRU 162909	
84P-F002K	25	12 161702 AND UP	
84P-F002M	25	13 F/A-18A 161353 THRU 163144 AN	NID
84P-G035A	25	F/A-18B	ND
84P-G035B	25	14 F/A-18B 161704 AND UP; ALSO	
84P-G036	25	F/A-18B 161354 THRU 161360 AF	TED
84P-J037	26	F18 AFC 54	FIEK
20 84P-L096	26	15 161353 THRU 161359 BEFORE F	10
84P-P053	25	AFC 19	10
84P-P054	26	16 161353 THRU 161519 AFTER F18	AEC
84P-P059	26	26	AFC
84P-P060	26	17 161737 AND UP	
84P-P067	25	18 162826 AND UP	
84P-R056	25	19 F/A-18A	
84P-R057	26	20 F/A-18B	
84P-R064	26		
84P-R065	26		IIDII
84P-R068	25	22 161702 AND UP; ALSO 161353 T	HKU
9 84P-S017A	25	161528 AFTER F18 AFC 74	
9 84P-S017B	25	23 F/A-18A 161702 AND UP	
9 84P-T018A	25	24 F/A-18B 161704 AND UP	24
9 84P-T018B	25	25 161353 THRU 161761, AND 16192 26 162889 AND UP	24
84P-U019A	25		
84P-U019B	25	27 161353 THRU 162888	
84P-U027A	26	28 USED ON 74A770157-9ABA 29 USED ON 74A770157-9AHA -9B	A A
84P-U027B	26	<u>29</u> USED ON 74A770157-9AHA, -9B	AA
84P-V020A	25		
84P-V020B	25	1. DESCRIPTION.	
84P-V028A	26		
84P-V028B	26	2. The G7056 and G7925 EMI backshells	s are right
85P-G003A	25	angle backshells with strain relief provision	_
031 000311	23		
LEGEND		3. The G7057, G7183, G7924 and S2127	EMI back-
161353 THRU 161944		shells are straight backshells with strain r	elief provi-
2 161945 AND UP		sions.	
3 F/A-18A 161702 THRU 161739			
4 F/A-18A 161702 THRU 163175		4. The J1317 EMI adapter is a two piece	e adapter used
5 161522 AND UP		to install EMI backshells on rectangular of	_

- 5. The J1311F Cable Clamp ia rectangular cable clamp used on insert connectors with strain relief provisions.
- 6. The S2160 and S2163 adapters are metal adapters which are used to mate connectors with accessory hardware of a different size. S2160 mates MIL-C-38999 series 1 and 2, S2163 mates series 3 and 4.
- 7. The S2029 adapter is an extender for MIL-C-38999 series 1 and 2 connectors. Accessory hardware is mated to the extender in the same way it is mated to the connector.

Support Equipment Required

Part Number or Type Designation	Nomenclature
3308AS100	Repair Set - Wire And Connector

Materials Required

or Part Number	Nomenclature		
See Table 2	Silicone Rubber Tape		
See Table 3	Wire Mesh Tape		
See Table 4	Plastic Tiedown Strap		

Specification

Materials Required (Continued)

Specification or Part Number	Nomenclature		
SN60WRMAP2-0-040 (81348)	Solder		
MIL-T-43435TYPE-2 SIZE-3 FINISH-C	Tape, Lacing		
See Table 1	Tape, Insulation		

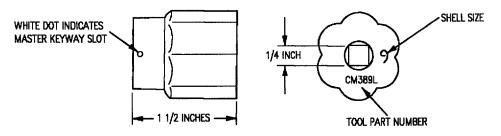
8. PROCEDURE.



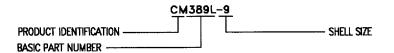
White dot on adapter tool must be in line with master key of connector before insertion. Spinning the adapter tool onto connector until it slips into place causes unnecessary wear to tools, keys and keyways.

9. CM ADAPTER TOOLS

a. CM adapter tool is shown in figure 1. Select tool part number to shell size from tool data in reference designation to backshell data index for specific cable clamp.



MIL-C-38999 SERIES 1



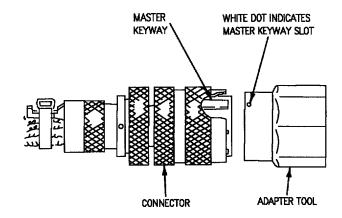
F/A-18-WRM-(500-18)02-CATI

Figure 1. CM Adapter Tool Part Numbering System



White dot on adapter tool must be in line with master key of connector before insertion. Spinning the adapter tool onto connector until it slips into place causes unnecessary wear to tools, keys and keyways.

b. Mate adapter tool to connector. See figure 2.



F/A18-WRM-000-(501-1)01-SCAN 17

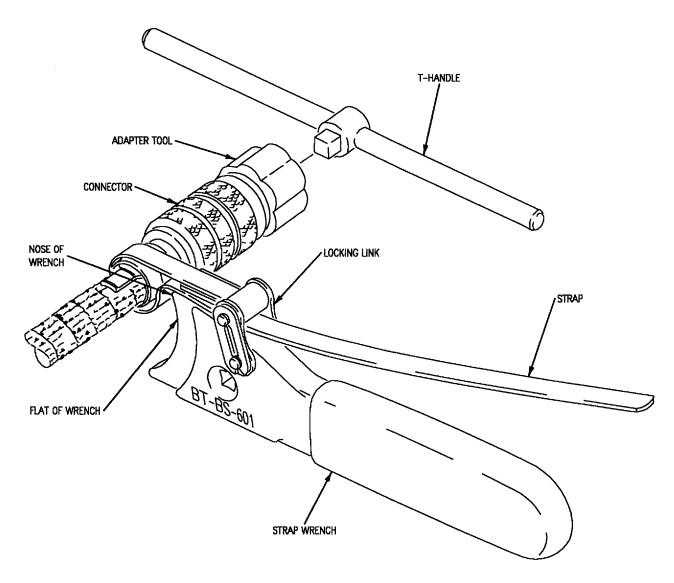
Figure 2. Adapter Tool Mating

10. STRAP WRENCH

NOTE

a. Install the strap around part to be tightened or loosened. Draw the strap tight and through the locking link so the cable clamp and strap rest on nose of wrench. See figure 3.

T-Handle can be used for additional gripping force to adapter if required.

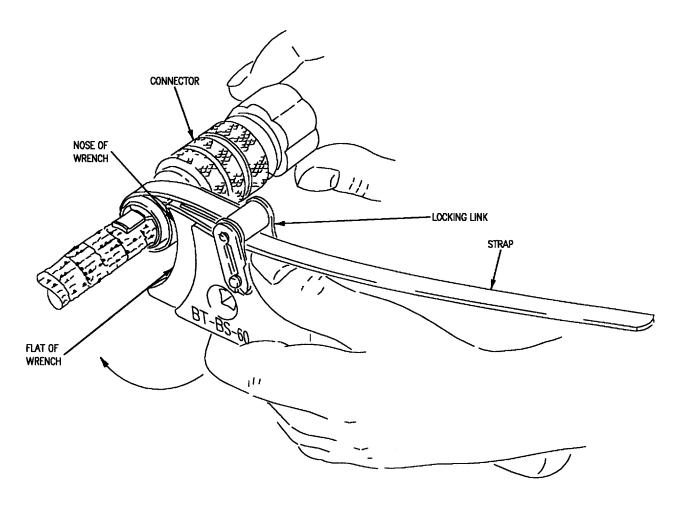


F/A18-WRM-000-(281-1)01-SCAN 40

Figure 3. Strap Wrench Setup and Adjustment

b. To tighten clamp, apply force in a clockwise direction as viewed from the rear of the connector. The clamp and strap are tucked beneath the nose

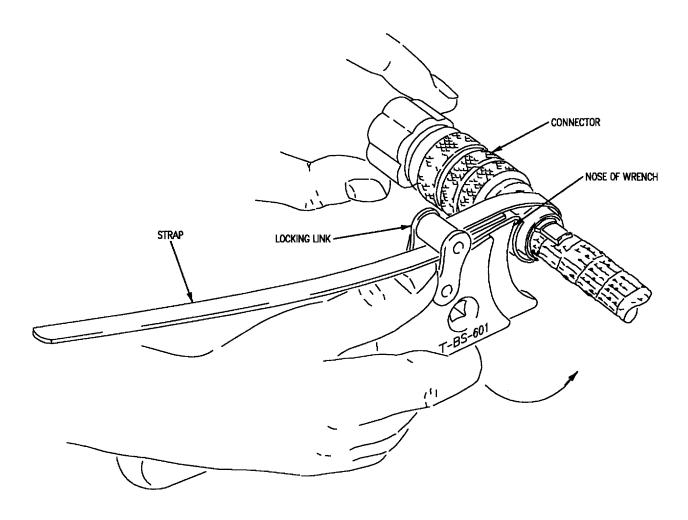
of the wrench and against the flat of the wrench. See figure 4.



18AE-WRM-000-(281-2)01-SCAN 34

Figure 4. Tightening Position of Wrench

c. To loosen clamp, turn counterclockwise as viewed from the rear of the connector. See figure 5.



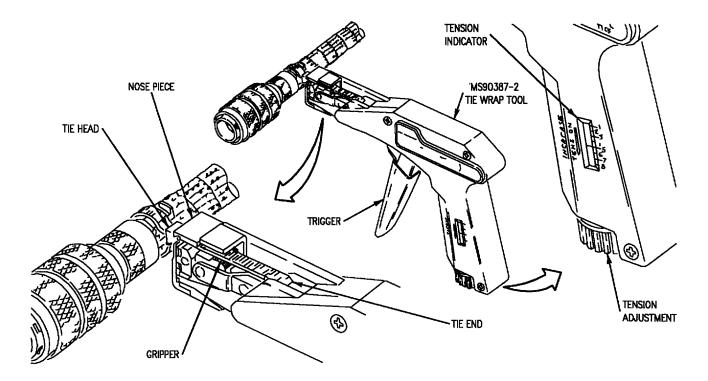
F/A18-WRM-000-(281-3)01-SCAN 34

Figure 5. Loosening Position of Wrench

11. TIE WRAP TOOL

- a. Adjust tool as specified in figure 6.
- b. Install cable tie around the cable/harness assembly.
- c. Thread tie end through slot in tie head and manually pull tight around harness assembly.

- d. Insert tie end through nose piece of tool and pull against tie head.
 - e. Center cable tie in tool slot and over gripper.
- f. Squeeze trigger until cable tie is cut off flush with tie head.
- g. Release trigger and discard cut off end of cable tie.

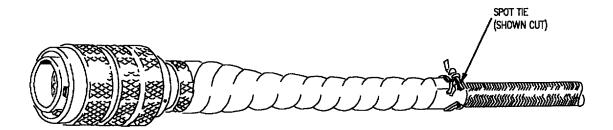


F/A18-WRM-000(282-1)01-SCAN 28

Figure 6. Tie Wrap Tool

12. **DISASSEMBLY PROCEDURE**

a. Remove spot tie from silicone rubber tape boot. See figure 7.



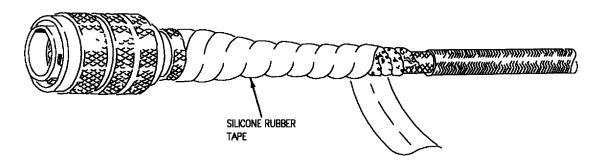
F/A18-WRM-000(283-1)01-SCAN 13

Figure 7. Spot Tie Removal



b. Unwrap or cut silicone rubber tape and remove from the boot area. See figure 8.

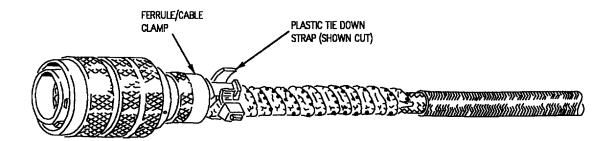
When cutting boot material with a sharp tool, extreme care must be taken not to nick or scrape the wire insulation beneath the cut.



F/A18-WRM-000-(283-2)01-SCAN 14

Figure 8. Silicone Rubber Tape Boot Removal

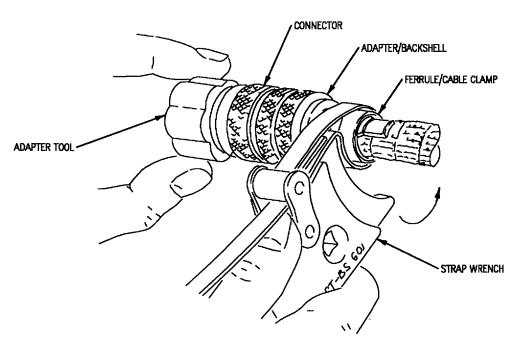
c. Cut and remove plastic tie down strap from ferrule/cable clamp. See figure 9.



F/A18-WRM-000-(283-3)01-SCAN 13

Figure 9. Plastic Tie Down Strap Removal

d. Remove ferrule/cable clamp from adapter/back-shell. See figure 10.



F/A18-WRM-000-(281-4)01-SCAN 24

Figure 10. Ferrule/Cable Clamp Removal

e. Remove teflon barrier tape. See figure 11.

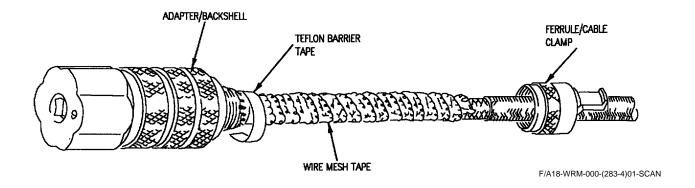


Figure 11. Teflon Barrier Tape Removal at Backshell

f. Unwrap wire mesh tape and remove reinforced silicone rubber tape. See figure 12.

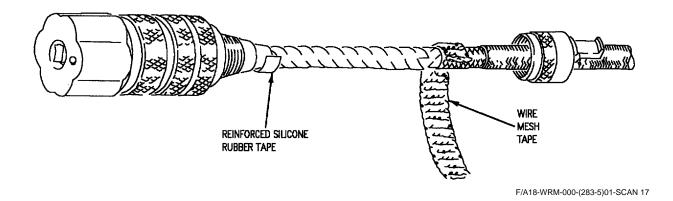


Figure 12. Wire Mesh Tape Removal

- g. If removal of wire mesh from the harness/cable assembly is required, unsolder from wire braid.
- h. Unwrap teflon barrier tape. See figure 13.

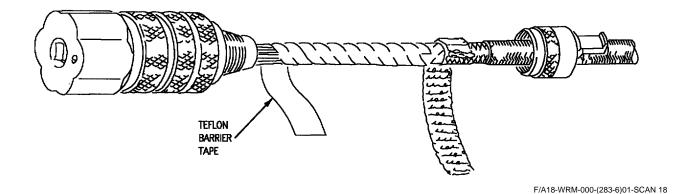


Figure 13. Teflon Barrier Tape Removal

i. Removal adapter/backshell. See figure 14.

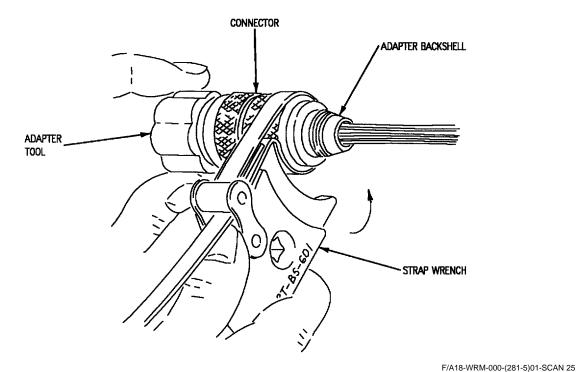
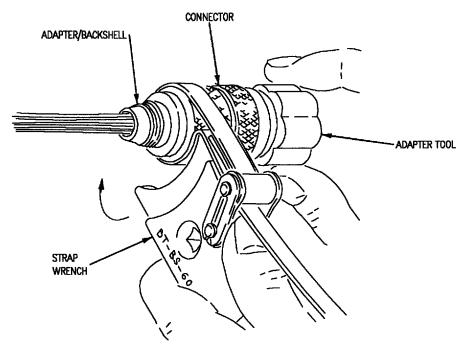


Figure 14. Adapter/Backshell Removal

13. REASSEMBLY PROCEDURE

a. Slide adapter/backshell onto connector and tighten. See figure 15.



F/A18-WRM-000-(281-6)01-SCAN 25

Figure 15. Installation of Adapter Backshell

Table 1. Insulation Tape

PART NUMBER	CAGE	WIDTH (INCH)	
MIL-I-18746-1.000X.005X.36YDS MIL-I-23594, TYPE 2, 1/2 IN. WIDE	81349 81349	1.000 .500	
SELF - BONDING TAPE COMES IN ROLLS			

b. Spiral wrap exposed wire with teflon barrier tape. See figure 16.

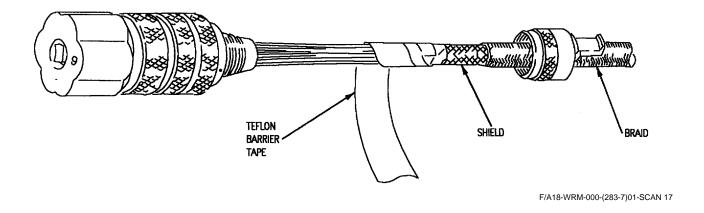


Figure 16. Spiral Wrapping Teflon Barrier Tape

Table 2. Teflon Barrier Tape

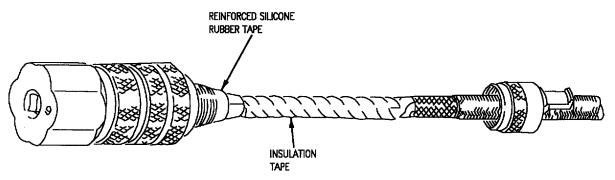
PART NUMBER	CAGE	WIDTH (INCH)
MIL-I-46852, TYPE 2, 1.000IN.BLK	38138 07099	1.000 1.000

SELF - BONDING TAPE COMES IN ROLLS

COLOR - BLACK

TEMPERATURE RANGE; -178° TO +500°F

c. Build up a tapered area of reinforced silicone rubber tape behind the adapter/backshell. See figure 17.



F/A11-WRM-000-(283-8)01-SCAN 13

Figure 17. Silicone Rubber Tape Buildup

Table 3. Wire Mesh Tape

PART NUMBER	CAGE	WIDTH (INCH) NOMINAL	THICKNESS (INCH) NOMINAL	WIRE DIAMETER (INCH)
SC61289	22798	1.000	1/64	3/64 (37 GAGE)

TAPE COMES IN ROLLS

OUTSIDE DIAMETER 3 INCHES.

TEMPERATURE RANGE: -65° TO +300°F

d. If necessary, solder wire mesh tape to metal braid. See figure 18.

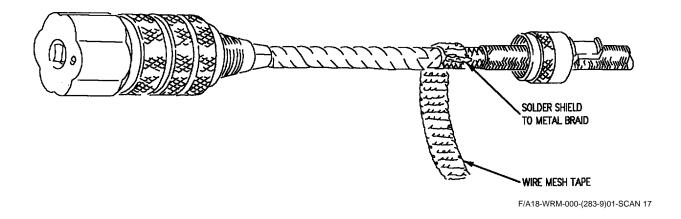
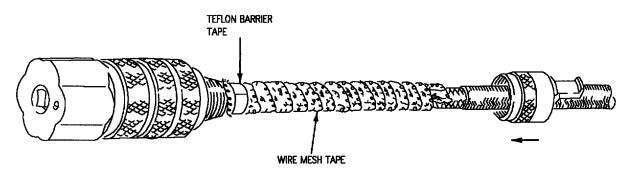


Figure 18. Soldering Wire Mesh Tape to Shield

e. Wrap wire mesh tape with a 50 percent overlap and secure in place with teflon barrier tape. See figure 19.



F/A18-WRM-000-(283-10)01-SCAN

Figure 19. Securing Wire Mesh Tape Wrap

f. Install ferrule/cable clamp and tighten with strap wrench. See figure 20.

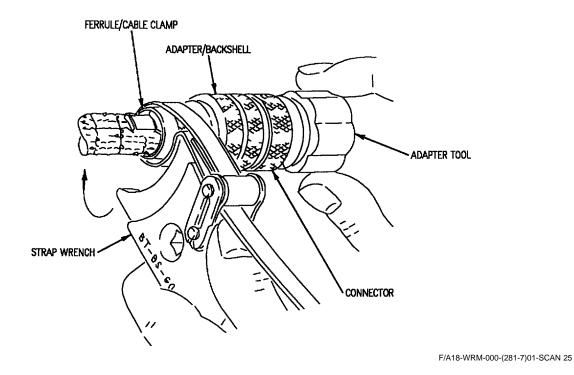
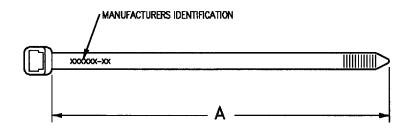


Figure 20. Ferrule/Cable Clamp Installation

Table 4. Plastic Tie Down Strap



F/A-18-WRM-(510-1)01-CATI

PART NUMBER	LENGTH A (INCH)	CONNECTOR SHELL SIZE	MS90387-1 TOOL TENSION SETTING	MILITARY SPECIFICATION
PLT-2S-CP30	6-1/32	8 THRU 19	6	MIL-S-23190
PLT4H-C30	12.00	20 THRU 25	8	MIL-S-23190
SST-2H-C30	7-1/2	20 THRU 25	8	MIL-S-23190
TEMPERATURE RANGE: -65° TO +300°F				

g. Install plastic tie wrap with tie wrap installation tool. See figure 21.

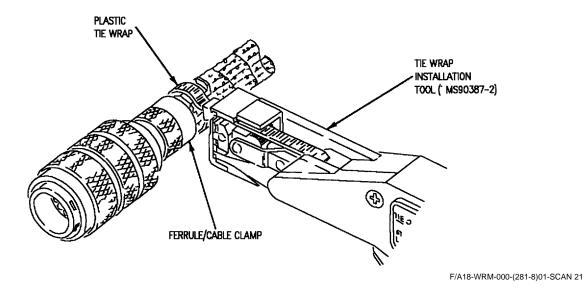
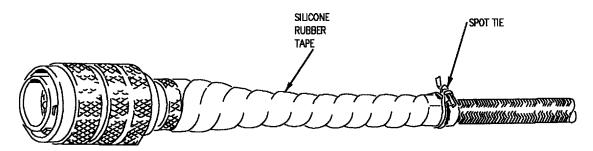


Figure 21. Securing Ferrule/Cable Clamp

h. Wrap wire mesh tape with a 50 % overlap of silicone rubber tape and secure the end with a spot tie of lacing tape. See figure 22.



F/A18-WRM-000-(283-11)02-SCAN

Figure 22. Securing Silicone Rubber Tape Boot

14. REMOVAL OF J1317 EMI ADAPTER.

- 15. The J1317 EMI adapter is a two piece adapter used to adapt circular EMI backshells to rectangular connectors.
- 16. **REMOVAL**. To remove J1317 EMI a from connectors, do substeps below:
- a. Remove ferrule/cable clamp and adapter/back-shell per paragraph 12.
- b. Remove 4 screws attaching EMI adapter to rear of connector. See figure 23
- c. Remove two piece EMI adapter from rear of connector.

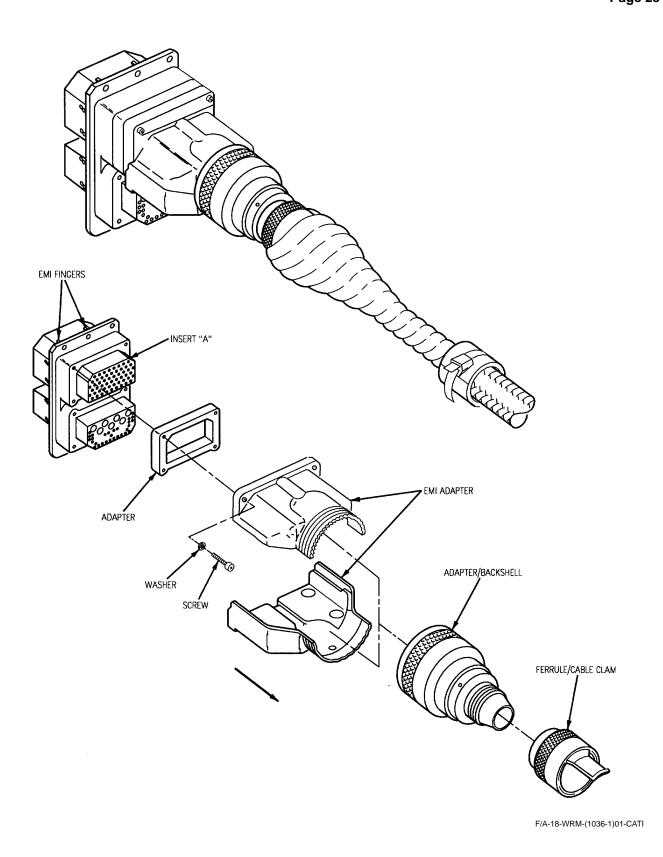


Figure 23. Removal of J1317 EMI Adapter

17. REASSEMBLY OF J1317 EMI ADAPTER.

- a. Fit both pieces of adapter together on rear of rectangular connector. See Figure 24.
- b. Insert 4 screws in EMI adapter and tighten.
- c. Install adapter/backshell and ferrule/cable lamp per paragraph 13.

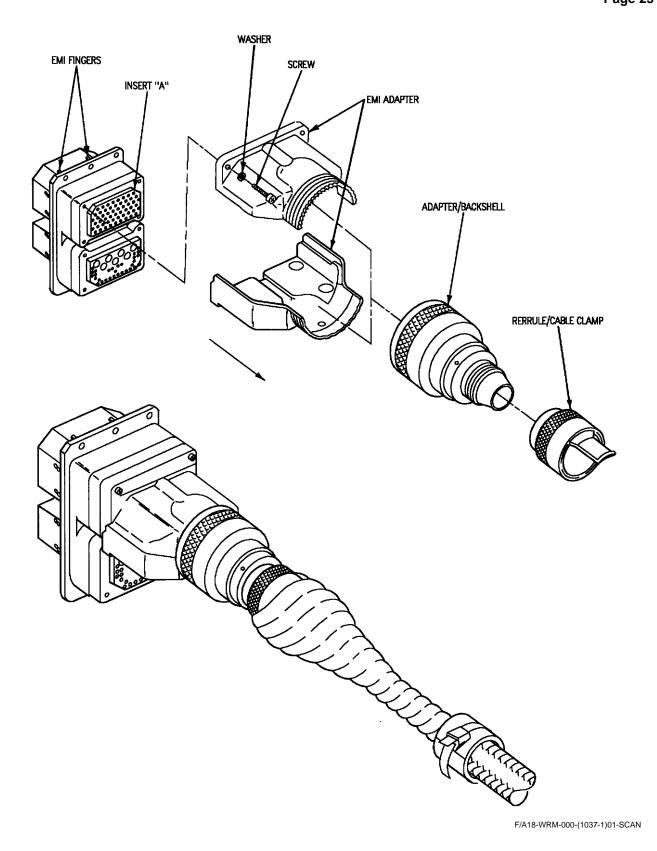
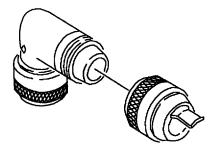


Figure 24. Reassembly of J1317 EMI Adapter



F/A-18-WRM-(351-1)01-SCAN

Reference Designation to Backshell Data Index for G7056 and G7925 Backshells

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
10P-F015	G7056-9-NF	169 00	CM389L-9
10 10P-G009	G7056-11-NF	169 00	CM389L-11
12P-G005	G7056-11-NF	169 00	CM389L-11
12P-G007	G7056-9-NF	169 00	CM389L-9
12P-R006	G7056-11-NF	169 00	CM389L-11
13P-G008	G7056-11-NF	169 00	CM389L-11
18P-S003	G7056-11-NF	169 00	CM389L-11
11 18P-T014	G7056-9-NF	169 00	CM389L-9
19P-S013	G7056-11-NF	169 00	CM389L-11
19P-T012	G7056-9-NF	169 00	CM389L-9
14 20P-E012	G7056-17-NF	169 00	CM389L-17
13 20P-K006	G7056-15-NF	169 00	CM389L-15
14 20P-L013	G7056-17-NF	169 00	CM389L-17
14 20P-L014	G7056-9-NF	169 00	CM389L-9
22P-E003	G7056-11-NF	169 00	CM389L-11
22P-G056	G7056-21-NF	169 00	CM389L-21
22P-G073	G7056-11-NF	169 00	CM389L-11
22P-G108	G7056-17-NF	169 00	CM389L-17
15 22P-G172	G7056-11-NF	169 00	CM389L-11
22P-M009	G7056-9-NF	169 00	CM389L-9
24P-P011	G7056-17-NF	169 00	CM389L-17
8 3P-P095	G7056-9-NF	169 00	CM389L-9
7 3P-R096	G7056-9-NF	169 00	CM389L-9
34P-G003	G7056-13-NF	169 00	CM389L-13
16 34P-P004	G7056-11-NF	169 00	CM389L-11
4P-R023	G7056-17-NF	169 00	CM389L-17
5J-R135	G7056-17-NF	170 00	BT-J-143
5P-B007	G7056-13-NF	169 00	CM389L-13
5P-P072	G7056-11-NF	169 00	CM389L-11
5P-P145	G7056-13-NF	169 00	CM389L-13
5P-P151	G7056-11-NF	169 00	CM389L-11
3 5P-P152	G7056-11-NF	169 00	CM389L-11

Figure 25. G7056 and G7925 EMI Backshells (Sheet 1)

Reference Designation to Backshell Data Index for G7056 and G7925 Backshells (Continued)

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
5P-R070	G7056-11-NF	169 00	CM389L-11
5P-R144	G7056-13-NF	169 00	CM389L-13
52J-J156	G7056-9-NF	172 00	CM389L-9
13 52J-L154	G7056-11-NF	172 00	CM389L-11
52J-U150	G7056-17-NF	172 00	CM389L-17
52J-V151	G7056-17-NF	172 00	CM389L-17
52P-B021	G7056-13-NF	169 00	CM389L-13
14 52P-E154	G7056-11-NF	169 00	CM389L-11
52P-G022	G7056-19-NF	169 00	CM389L-19
52P-G051	G7056-21-NF	169 00	CM389L-21
52P-L050	G7056-11-NF	169 00	CM389L-11
52P-P110	G7056-25-NF	169 00	CM389L-25
2 52P-P125	G7925-15	168 00	CM389T-1SA
52P-P125	G7925-15	190 00	CM389L-15
	G7925-13 G7925-11		CM389L-13
52P-R124		190 00	
2 52P-R124	G7925-11	168 00	CM389T-11A
61J-J033	G7056-15-NF	172 00	CM389L-15
17 61J-Y206	G7056-11-NF	172 00	CM389L-11
51P-P014A	G7056-23-NF	169 00	CM389L-23
51P-P014B	G7056-11-NF	169 00	CM389L-11
51P-P014C	G7056-11-NF	169 00	CM389L-11
51P-R016A	G7056-23-NF	169 00	CM389L-23
51P-R016B	G7056-11-NF	169 00	CM389L-11
61P-R016C	G7056-11-NF	169 00	CM389L-11
61P-Y205	G7056-11-NF	171 00	CM389S-10
7J-U042	G7056-9-NF	172 00	CM389L-9
7J-V043	G7056-9-NF	172 00	CM389L-9
7P-G026	G7056-9-NF	169 00	CM389L-9
7P-S048	G7056-9-NF	169 00	CM389L-9
76P-B003	G7056-11-NF	169 00	CM389L-11
76P-B023A	G7056-11-NF	169 00	CM389L-11
76P-H009D	G7056-15-NF	169 00	CM389L-15
9 79P-L023	G7056-13-NF	169 00	CM389L-13
19 8P-L080	G7056-11-NF	169 00	CM389L-11
18 8P-L080B	G7056-11-NF	169 00	CM389L-11
80P-H001A	G7056-21-NF	200 00	CM389L-21
80P-J002A	G7056-21-NF	200 00	CM389L-21 CM389L-21
30P-J002A	G7056-21-NF	200 00	CM389L-21 CM389L-21
80P-J003B	G7056-21-NF	200 00	CM389L-21 CM389L-21
80P-K019A	G7056-21-NF	200 00	CM389L-21
80P-K023	G7056-13-NF	169 00	CM389L-13
14 80P-L017A	G7056-21-NF	200 00	CM389L-21
		169 00	
82P-F001B 84P-F001C	G7056-21-NF G7056-19-NF	169 00	CM389L-19
		169 00	CM389L-19
84P-F001E 84P-F001K	G7056-19-NF	169 00	CM389L-19
	G7056-19-NF	169 00	CM389L-19
84P-F001M	G7056-19-NF	109 00	CM389L-19

Figure 25. G7056 and G7925 EMI Backshells (Sheet 2)

17 161353 THRU 161761, AND 161924.

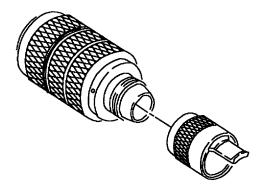
19 161353 THRU 161359 BEFORE F18 AFC 19.

161360 AND UP; ALSO 161353 THRU 161359 AFTER F18 AFC 19.

Reference Designation to Backshell Data Index for G7056 and G7925 Backshells (Continued)

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER		
84P-F002C	G7056-19-NF	169 00	CM389L-19		
84P-F002E	G7056-19-NF	169 00	CM389L-19		
84P-F002K	G7056-19-NF	169 00	CM389L-19		
84P-F002M	G7056-19-NF	169 00	CM389L-19		
84P-G035A	G7056-11-NF	169 00	CM389L-11		
84P-G035B	G7056-11-NF	169 00	CM389L-11		
84P-G036	G7056-9-NF	169 00	CM389L-9		
84P-P053	G7056-25-NF	169 00	CM389L-25		
84P-P067	G7056-15-NF	169 00	CM389L-15		
84P-R056	G7056-25-NF	169 00	CM389L-25		
84P-R068	G7056-15-NF	169 00	CM389L-15		
6 84P-S017A	G7056-13-NF	169 00	CM389L-13		
26 84P-S017B	G7056-13-NF	169 00	CM389L-13		
6 84P-T018A	G7056-13-NF	169 00	CM389L-13		
26 84P-T018B	G7056-13-NF	169 00	CM389L-13		
84P-U019A	G7056-13-NF	169 00	CM389L-13		
84P-U019B	G7056-13-NF	169 00	CM389L-13		
84P-V020A	G7056-13-NF	169 00	CM389L-13		
84P-V020B	G7056-13-NF	169 00	CM389L-13		
85P-G003A	G7056-15-NF	169 00	CM389L-15		
1 161353 THRU 161761.					
2 161924 THRU 163175.					
3 162889 AND UP.					
4 161522 THRU 163175.					
5 161522 AND UP.					
6 161353 THRU 161719.					
7 161353 THRU 161519 A	AFTER F18 AFC 26.				
8 161702 AND UP; ALSO	161353 THRU 161528 AFTER F	F18 AFC 74.			
9 F/A-18A 161741 AND U	JP; ALSO 161353 THRU 161528	AFTER F18 AFC 54.			
10 161945 AND UP.					
162826 AND UP.					
161745 AND UP.					
13 F/A-18A.	13 F/A-18A.				
14 F/A-18B.					
163092 AND UP.					
16 F/A-18A 161353 THRU 163144 AND F/A-18B.					

Figure 25. G7056 and G7925 EMI Backshells (Sheet 3)



F/A-18-WRM-(351-2)01-SCAN

Reference Designation to Backshell Data Index for G7057 Backshells

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
1 10P-G009	G7057-11-1NF	169 00	CM389L-11
10P-G017	G7057-9-1NF	169 00	CM389L-9
12J-G029	G7057-9-1NF	172 00	CM389L-9
11 12J-G060	G7057-9-1NF	172 00	CM389L-9
11 12J-G061	G7057-9-1NF	172 00	CM389L-9
12P-G029	G7057-9-1NF	169 00	CM389L-9
11 12P-G060	G7057-9-1NF	169 00	CM389L-9
12P-G061	G7057-9-1NF	169 00	CM389L-9
13P-P006	G7057-9-1NF	169 00	CM389L-9
13P-R005	G7057-9-1NF	169 00	CM389L-9
5 19J-S013	G7057-11-1NF	170 00	BT-J-132
12 19P-S013	G7057-11-1NF	169 00	CM389L-11
19P-T009	G7057-9-1NF	169 00	CM389L-9
20P-J003	G7057-11-1NF	169 00	CM389L-11
22P-E007	G7057-9-1NF	169 00	CM389L-9
22P-E010	G7057-9-1NF	169 00	CM389L-9
22P-M008	G7057-9-1NF	169 00	CM389L-9
3J-M028	G7057-11-1NF	170 00	BT-J-132
3J-N033	G7057-11-1NF	170 00	BT-J-132
2 3P-R096	G7057-9-1NF	169 00	CM389L-9
5P-B006	G7057-11-1NF	169 00	CM389L-11
3 5P-P152	G7057-11-1NF	169 00	CM389L-11
52J-L050	G7057-11-1NF	172 00	CM389L-11
52J-P157	G7057-11-1NF	172 00	CM389L-11
52J-R158	G7057-11-1NF	172 00	CM389L-11
52J-U152	G7057-13-NF	172 00	CM389L-13
52J-V153	G7057-13-NF	172 00	CM389L-13
52P-P035	G7057-13-NF	169 00	CM389L-13
52P-P064A	G7057-13-NF	169 00	CM389L-13
52P-P064B	G7057-23-NF	169 00	CM389L-23

Figure 26. G7057 EMI Backshell (Sheet 1)

Reference Designation to Backshell Data Index for G7057 Backshells (Continued)

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
52P-P111	G7057-23-NF	169 00	CM389L-23
52P-P117	G7057-17-NF	169 00	CM389L-17
52P-P123	G7057-15NF	169 00	CM389L-15
52P-R036	G7057-13-NF	169 00	CM389L-13
52P-R066A	G7057-13-NF	169 00	CM389L-13
52P-R066B	G7057-23-NF	169 00	CM389L-23
52P-R113	G7057-25-NF	169 00	CM389L-25
52P-R114	G7057-11-1NF	169 00	CM389L-11
52P-R116	G7057-21-NF	169 00	CM389L-21
52P-U150	G7057-17-NF	169 00	CM389L-17
52P-U152	G7057-13-NF	169 00	CM389L-13
52P-V151	G7057-17-NF	169 00	CM389L-17
52P-V153	G7057-13-NF	169 00	CM389L-13
13 61J-F034	G7057-15-NF	172 00	CM389L-11
61J-U045	G7057-11-1NF	170 00	BT-J-132
61J-V046	G7057-11-1NF	170 00	BT-J-132
61J-W024	G7057-25-NF	172 00	CM389L-25
61J-W093	G7057-23-NF	172 00	CM389L-23
61J-W112	G7057-23-NF	172 00	CM389L-23
61J-W210	G7057-11-1NF	172 00	CM389L-11
61J-W239	G7057-9-1NF	172 00	CM389L-9
14 61J-Y200A	G7057-13-NF	172 00	CM389L-13
14 61J-Y200B	G7057-23-NF	172 00	CM389L-23
10 61P-F034	G7057-15NF	169 00	CM389L-15
61P-G165	G7057-11-1NF	169 00	CM389L-11
61P-U011A	G7057-13-NF	169 00	CM389L-13
61P-U011B	G7057-13-NF	169 00	CM389L-13
61P-V019A	G7057-13-NF	169 00	CM389L-13
61P-V019B	G7057-13-NF	169 00	CM389L-13
61P-W012A	G7057-25-NF	169 00	CM389L-25
61P-W012C	G7057-23-NF	169 00	CM389L-23
61P-W012D	G7057-23-NF	169 00	CM389L-23
61P-W023A	G7057-13-NF	169 00	CM389L-13
61P-W023B	G7057-25-NF	169 00	CM389L-25
61P-W023C	G7057-15NF	169 00	CM389L-15
61P-W097A	G7057-17-NF	169 00	CM389L-17
61P-W212	G7057-19-NF	177 00	CM389L-19
61P-W213	G7057-19-NF	177 00	CM389L-19
61P-W239	G7057-9-1NF	169 00	CM389L-9
61P-W258	G7057-9-1NF	169 00	CM389L-15
61P-Y100A	G7057-17NF	169 00	CM389L-17
61P-Y112	G7057-23-NF	169 00	CM389L-23
61P-Y287	G7057-17-NF	169 00	CM389L-17
61P-Z105A	G7057-17-NF	169 00	CM389L-17
61P-Z167	G7057-17-NF	169 00	CM389L-17
7P-S036B	G7057-15NF	169 00	CM389L-15
7P-S036C	G7057-15NF	169 00	CM389L-15
7P-S037	G7057-15NF	169 00	CM389L-15

Figure 26. G7057 EMI Backshell (Sheet 2)

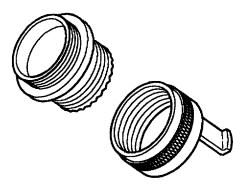
Reference Designation to Backshell Data Index for G7057 Backshells (Continued)

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
7P-T038	G7057-15NF	169 00	CM389L-15
75J-N001	G7057-11-1NF	172 00	CM389L-11
76J-J003	G7057-11-1NF	172 00	CM389L-11
19 79P-E023	G7057-13-NF	169 00	CM389L-13
79P-J001A	G7057-21-NF	200 00	CM389L-21
79P-J001B	G7057-21-NF	200 00	CM389L-21
19 79P-L023	G7057-13-NF	169 00	CM389L-13
15 80P-L016A	G7057-21-NF	200 00	CM389L-21
83J-G003	G7057-15-NF	172 00	CM389L-15
7 84P-J037	G7057-17-NF	169 00	CM389L-17
6 84P-J037	G7057-21-NF	169 00	CM389L-17
9 84P-L096	G7057-17-NF	169 00	CM389L-17
8 84P-L096	G7057-21-NF	169 00	CM389L-21
34P-P054	G7057-23-NF	169 00	CM389L-23
84P-P059	G7057-17-NF	169 00	CM389L-17
84P-P060	G7057-15NF	169 00	CM389L-15
84P-R057	G7057-23-NF	169 00	CM389L-23
84P-R064	G7057-15NF	169 00	CM389L-15
84P-R065	G7057-15NF	169 00	CM389L-15
34P-U027A	G7057-13-NF	169 00	CM389L-13
34P-U027B	G7057-13-NF	169 00	CM389L-13
34P-V028A	G7057-13-NF	169 00	CM389L-13
84P-V028B	G7057-13-NF	169 00	CM389L-13

1	161353 THRU 161944.

- 2 161702 AND UP.
- 3 161353 THRU 162888.
- 4 F/A-18A 161702 THRU 161739.
- 5 161522 AND UP.
- 6 161353 THRU 161519 BEFORE F18 AFC 27.
- 7 161520 AND UP, 161353 THRU 161519 AFTER F18 AFC 27.
- 8 F/A-18B 161354 THRU 161360.
- 9 F/A-18B 161704 AND UP.
- 10 F/A-18B.
- 11 161737 AND UP.
- 12 161522 AND UP.
- 13 F/A-18A.
- 161353 THRU 161761, AND 161924.

Figure 26. G7057 EMI Backshell (Sheet 3)



F/A-18-WRM-(601-1)01-CATI

Reference Designation to Backshell Data Index for G7173 and S2127 EMI Backshells

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
61P-W212	S2127-16-34D	177 00	None
61P-W213	S2127-16-34D	177 00	None
61P-Y247A	G7173-19NF	180 00	None

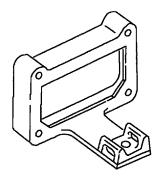
Figure 27. G7173 and S2127 EMI Backshells



F/A18-WRM-000-(1092-1)01-SCAN 11

Reference Designation to Adapter Data Index for G8682 EMI Adapter

REFERENCE DESIGNATION	ADAPTER	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
5P-Y025	G8682-13NF	169 00	CM389L-13
52P-L050	G8682-11NF	169 00	CM389L-11



F/A18-WRM-000-(1087-1)01-SCAN 14

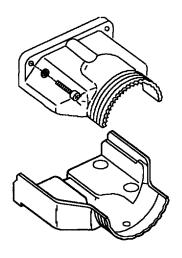
Reference Designation to Adapter Data Index for J1311F EMI Adapter

REFERENCE DESIGNATION	ADAPTER	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER	
1 52J-E009A	J1311F	201 00	None	
52J-E009B	J1311F	201 00	None	
3 52J-E010A	J1311F	201 00	None	
3 52J-E010B	J1311F	201 00	None	
3 52J-F002A	J1311F	201 00	None	
3 52J-F002B	J1311F	201 00	None	
3 52J-F004A	J1311F	201 00	None	
3 52J-F004B	J1311F	201 00	None	
3 52J-F005A	J1311F	201 00	None	
3 52J-F005B	J1311F	201 00	None	
2 52J-P009A	J1311F	201 00	None	
2 52J-P009B	J1311F	201 00	None	
52J-P010A	J1311F	201 00	None	
52J-P010B	J1311F	201 00	None	
52J-R002A	J1311F	201 00	None	
52J-R002B	J1311F	201 00	None	
52J-R004A	J1311F	201 00	None	
52J-R004B	J1311F	201 00	None	
52J-R005A	J1311F	201 00	None	
52J-R005B	J1311F	201 00	None	
5 52P-E009A	J1311F	201 00	None	
5 52P-E009B	J1311F	201 00	None	
52P-E010A	J1311F	201 00	None	
52P-E010B	J1311F	201 00	None	
52P-F002A	J1311F	201 00	None	
52P-F002B	J1311F	201 00	None	
52P-F004A	J1311F	201 00	None	
52P-F004B	J1311F	201 00	None	
52P-F005A	J1311F	201 00	None	
52P-F005B	J1311F	201 00	None	
1 F/A-18A 161702 AND UP.				

Figure 29. J1311F EMI Adapter (Sheet 1)

Reference Designation to Adapter Data Index for J1311F EMI Adapter (Continued)

REFERENCE DESIGNATION	ADAPTER	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER		
F/A-18B 161704 AND UP.					
3 F/A-18A					
4 F/A-18B					
5 F/A-18A 161702 THRU	163175.				



F/A-18-WRM-(351-3)01-SCAN

Reference Designation to Backshell Data Index for J1317 EMI Adapter

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
79P-J001A	J1317	200 00	None
79P-J001B	J1317	200 00	None
80P-H001A	J1317	200 00	None
80P-J002A	J1317	200 00	None
80P-J003A	J1317	200 00	None
80P-J003B	J1317	200 00	None
1 80P-K019A	J1317	200 00	None
1 80P-L016A	J1317	200 00	None
1 80P-L016B	J1317	200 00	None
1 80P-L017A	J1317	200 00	None
F/A-18B			

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

FABRICATION OF SHIELDED HARNESS TERMINATED WITH ELECTROMAGNETIC INTERFERENCE (EMI) AND TAPE WRAPPED THERMAL BARRIER BACKSHELLS

Reference Material

None

Alphabetical Index

Subject Pag	je No.
Adapter Tool Mating, Figure 2	4
Adapter/Backshell Removal, Figure 15	13
CM Adapter Tool Part Numbering System, Figure 1	4
CM Adapter Tools	4
Description	3
Disassembly Procedure	9
Ferrule/Cable Clamp Installation, Figure 21	19
Ferrule/Cable Clamp Removal, Figure 11	11
G7056 and G7925 EMI Backshell, Figure 25	23
G7057 and G7924 EMI Backshell, Figure 26	25
Hot Spotz Tape, Table 5	21
Hot Spotz Tape Boot Removal, Figure 9	10
Installation of Adapter Backshell, Figure 16	14
Loosening Position of Wrench, Figure 5	7
Materials Required	3
Permacel Tape, Table 6	22
Permacel Tape Boot Removal, Figure 8	9
Plastic Tie Down Strap Removal, Figure 10	10
Plastic Tie Down Strap, Table 4	20
Procedure	4
Reassembly Procedure	14
Reference Designation to Figure Number Index	2
Reinforced Silicone Rubber Tape Buildup at Backshell, Figure 18	16
Reinforced Silicone Rubber Tape, Table 2	16
Securing Ferrule/Cable Clamp, Figure 22	20
Securing Hot Spotz Tape Boot, Figure 23	21
Securing Permacel Tape Boot, Figure 24	22
Securing Wire Mesh Tape Wrap, Figure 20	18
Soldering Wire Mesh Tape to Shield, Figure 19	17
Spiral Wrapping Teflon Barrier Tape, Figure 17	15
Spot Tie Removal, Figure 7	9
Strap Wrench	5

Alphabetical Index (Continued)

Subject	Page No.
Strap Wrench Setup and Adjustment, Figure 3	5
Support Equipment Required	3
S2160 and S2163 Adapters, Figure 27	27
Teflon Barrier Tape Removal at Backshell, Figure 12	11
Teflon Barrier Tape Removal, Figure 14	12
Teflon Barrier Tape, Table 1	15
Tie Wrap Tool	8
Tie Wrap Tool, Figure 6	8
Tightening Position of Wrench, Figure 4	6
Wire Mesh Tape Removal, Figure 13	12
Wire Mesh Tape, Table 3	17

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

Reference Designation to Figure Number Index (Continued)

Reference Designation	Figure No.	Reference Designation	Figure No.
1P-P001	25	-	-
1P-R002	25	4P-R016	26
22J-S030	26	4P-R016 (Adapter)	27
22P-P030	25	4P-R022	26
22P-S024	26	4P-R022 (Adapter)	27
122P-S025	25	5J-P111	26
22P-S027	26	5J-R112	25
22P-T022	25	5J-P071	26
24P-S009	25	5P-P071 (Adapter)	27
24P-T008	26	5P-P113	25
24P-T010	25	5P-R114	25
3P-P006	25	52P-J105	25
3P-P010	25	52J-P125	25
3P-P055	26	52J-R104	25
3P-P064	25	52J-R124	25
3P-R007	25	52J-R124 (Adapter)	27
3P-R011	25	52J-T108	25
3P-R056	26	52P-P103	25
3P-R065	25	52P-P105	25
4P-P009	26	52P-P119	26
4P-P009 (Adapter)	25	52P-R102	25
4P-P010	25	52P-R104	25
4P-P010 (Adapter)	26	52P-R120	26
4P-P021	26	52P-S112	26
4P-P021 (Adapter)	27	LEGEN	ID.
4P-R015	26	<u>LEGEN</u>	<u>טו</u>
4P-R015 (Adapter)	27	161702 AND UP	

1. **DESCRIPTION.**

- 2. This work package explains procedures for installing thermal barrier protection boots, that are terminated with electromagnetic interference (EMI) backshells.
- 3. The G7056 and G7925 EMI backshells are right angle backshells with strain relief provisions.
- 4. The G7057 and G7924 EMI backshells are straight backshells with strain relief provisions.
- 5. The S2160 and S2163 adapters are metal adapters which are used to mate connectors with accessory hardware of a different size. S2160 mates MIL-C-38999 series 1 and 2, S2163 mates series 3 and 4.

Support Equipment Required

Part Number or Type Designation	Nomenclature
3308AS100	Repair Set - Wire And Connector

Materials Required

Specification or Part Number	Nomenclature
See Table 1	Teflon Barrier Tape
See Table 2	Silicone Rubber Tape
See Table 3	Wire Mesh Tape
See Table 4	Plastic Tie Down Strap
See Table 5	Hot Spotz Tape
See Table 6	Permacel Tape
SN60WRMAP2-0-040	Solder
MIL-T-43435TYPE-4	Tape, Lacing
SIZE-3FINISH-D	_
SR98	Silicone Varnish

6. PROCEDURE

7. CM ADAPTER TOOLS

a. CM adapter tool is shown in figure 1. Select tool part number to shell size from tool data in reference designation to backshell data index for specific cable clamp.

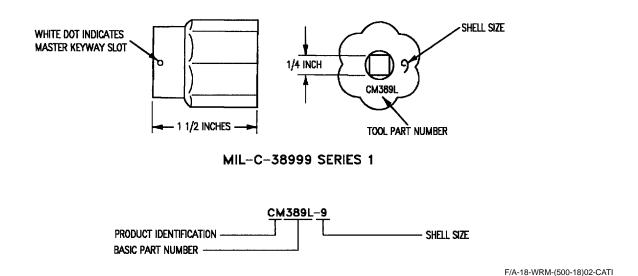
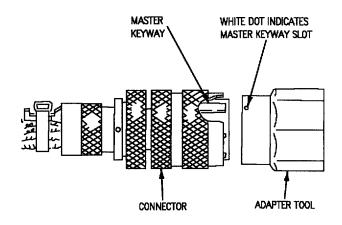


Figure 1. CM Adapter Tool Part Numbering System



White dot on adapter tool must be in line with master key of connector before insertion. Spinning the adapter tool onto connector until it slips into place causes unnecessary wear to tools, keys and keyways.

b. Mate adapter tool to connector. See figure 2.



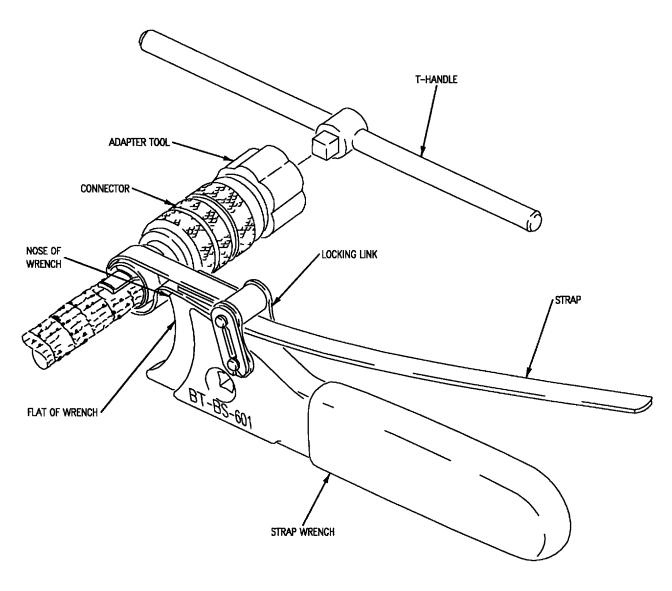
F/A18-WRM-000-(501-1) 01-SCAN 17

Figure 2. Adapter Tool Mating

8. STRAP WRENCH NOTE

a. Install the strap around part to be tightened or loosened. Draw the strap tight and through the locking link so the cable clamp and strap rests on nose of wrench. See figure 3.

T-Handle can be used for additional gripping force to adapter if required.

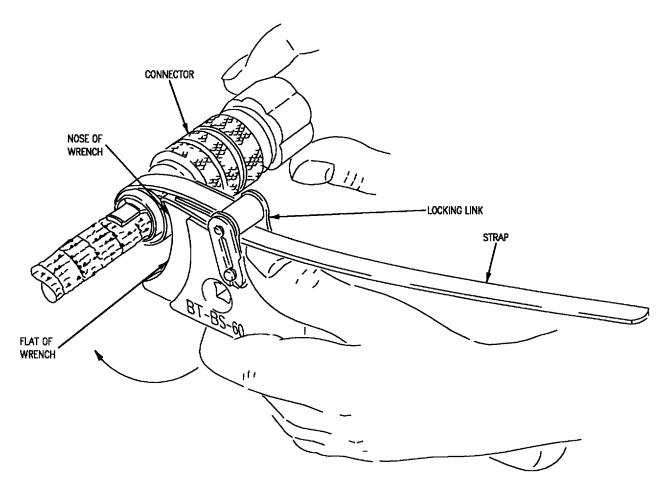


F/A18-WRM-000-(281-1)01-SCAN 40

Figure 3. Strap Wrench Setup and Adjustment

b. To tighten clamp, apply force in a clockwise direction as viewed from the rear of the connector. The clamp and strap are tucked beneath the nose

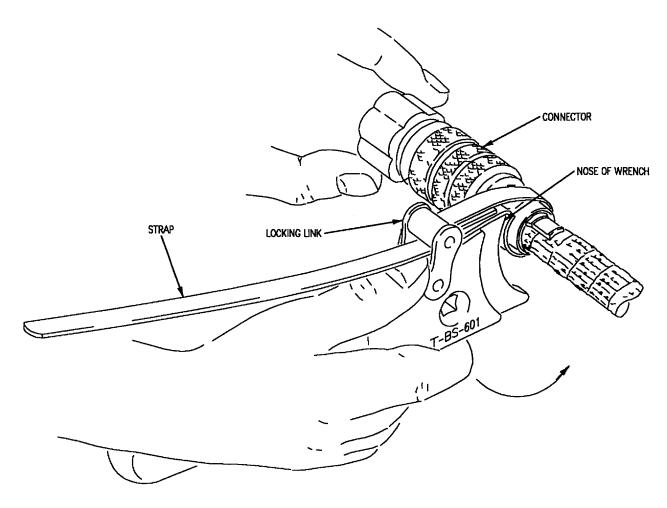
of the wrench and against the flat of the wrench. See figure 4.



18AE-WRM-000-(281-2)01-SCAN 34

Figure 4. Tightening Position of Wrench

c. To loosen clamp, turn counterclockwise as viewed from the rear of the connector. See figure 5.

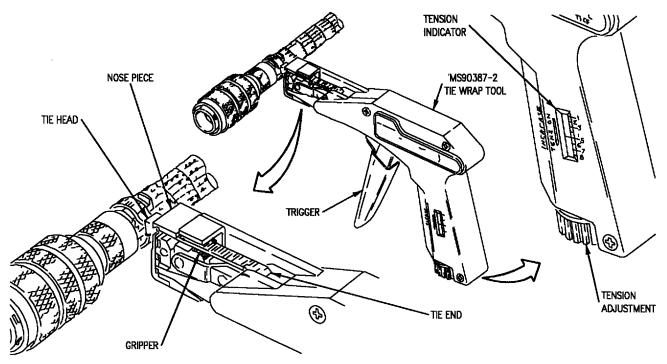


F/A18-WRM-000-(281-3)01-SCAN 34

Figure 5. Loosening Position of Wrench

9. TIE WRAP TOOL

- a. Adjust tool as specified in figure 6.
- b. Install cable tie around the cable/harness assembly.
- c. Thread tie end through slot in tie head manually pull tight around harness assembly.
- d. Insert tie end through nose piece of tool and pull against tie head.
 - e. Center cable tie in tool slot and over gripper.
- f. Squeeze trigger until cable tie is cut off flush with tie head.
- g. Release trigger and discard cut off end of cable tie.

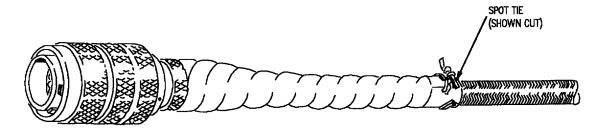


F/A18-WRM-000-(282-11)01-SCAN 28

Figure 6. Tie Wrap Tool

10. DISASSEMBLY PROCEDURE

a. Remove spot tie from permacel tape boot. See figure 7.



F/A18-WRM-000(283-1)01-SCAN 13

Figure 7. Spot Tie Removal

b. Unwrap or cut permacel tape and remove from the boot area. See figure $8. \,$



When cutting boot material with a sharp tool, extreme care must be taken not to nick or scrape the wire insulation beneath the cut.

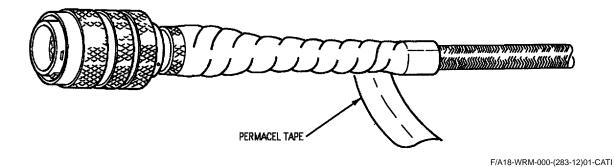


Figure 8. Permacel Tape Boot Removal

c. Unwrap or cut hot spotz tape and remove from boot area. See figure 9.

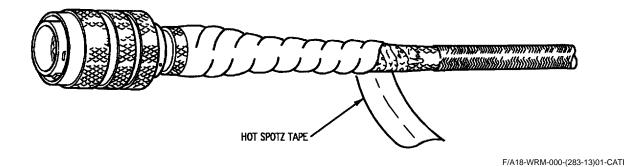
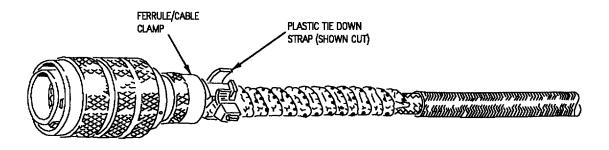


Figure 9. Hot Spotz Tape Boot Removal

d. Cut and remove plastic tie down strap from ferrule/cable clamp. See figure 10.



F/A18-WRM-000-(283-3)01-SCAN 13

Figure 10. Plastic Tie Down Strap Removal

e. Remove ferrule/cable clamp from adapter/back-shell. See figure 11.

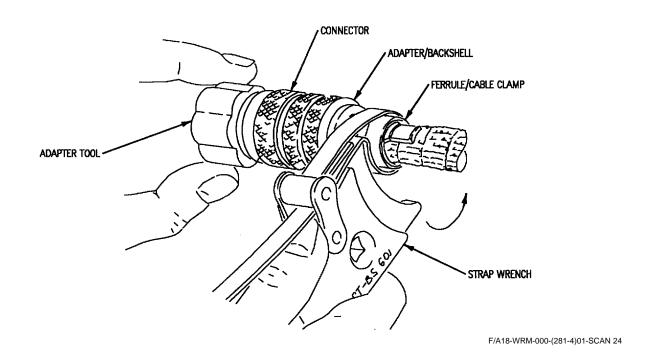


Figure 11. Ferrule/Cable Clamp Removal

f. Remove teflon barrier tape. See figure 12.

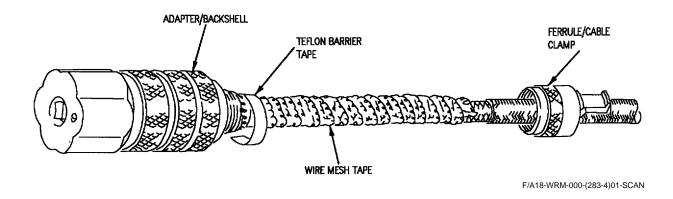


Figure 12. Teflon Barrier Tape Removal at Backshell

g. Unwrap wire mesh tape and reinforced silicone rubber tape from boot area. See figure 13.

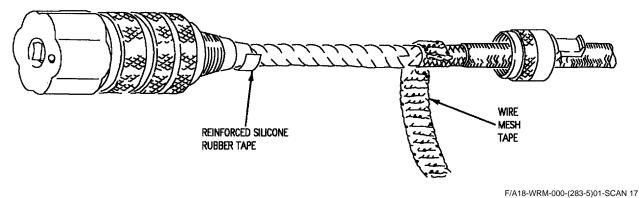
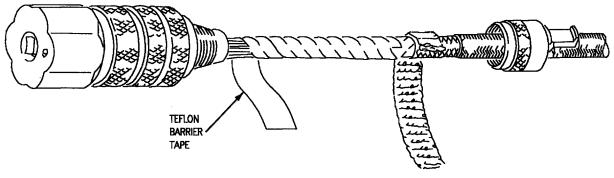


Figure 13. Wire Mesh Tape Removal

h. If removal of wire mesh from the harness/cable assembly is required, unsolder from wire braid.

i. Unwrap teflon barrier tape. See figure 14.



F/A18-WRM-000-(283-6)01-SCAN 18

Figure 14. Teflon Barrier Tape Removal

j. Remove adapter/backshell. See figure 15.

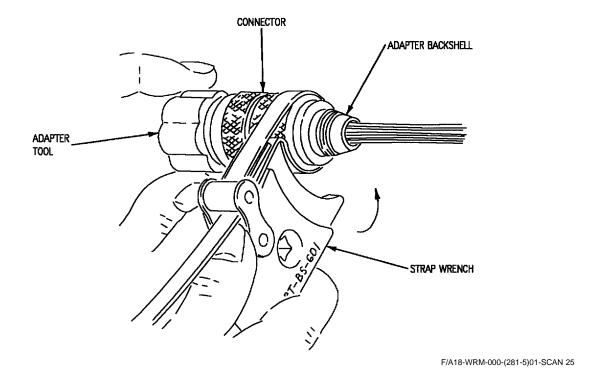
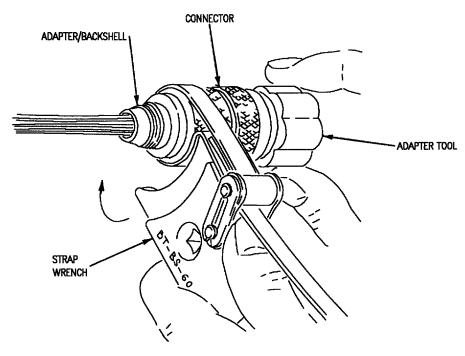


Figure 15. Adapter/Backshell Removal

11. REASSEMBLY PROCEDURE

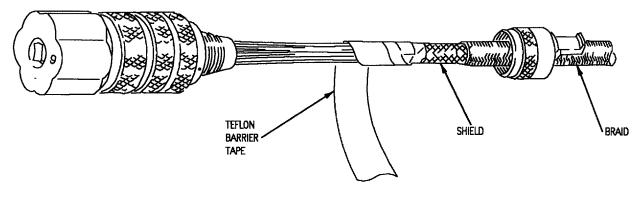
a. Slide adapter/backshell onto connector and tighten. See figure 16.



F/A18-WRM-000-(281-6)01-SCAN 25

Figure 16. Installation of Adapter Backshell

b. Spiral wrap exposed wire with teflon barrier tape. See figure 17.



F/A18-WRM-000-(283-7)01-SCAN 17

Figure 17. Spiral Wrapping Teflon Barrier Tape

Table 1. Teflon Barrier Tape

PART NUMBER	CAGE	WIDTH (INCH)
MIL-I-23594,TYPE 2,0.500IN.	81349	1/2

TAPE COMES IN ROLLS COLOR - WHITE OR BROWN

TEMPERATURE RANGE; -130° TO +500°F

c. Build up a tapered area of reinforced silicone rubber tape behind the adapter/backshell. See figure 18.

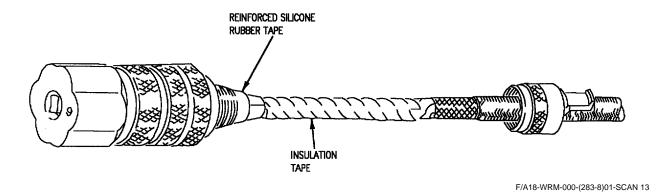


Figure 18. Reinforced Silicone Rubber Tape Buildup at Backshell

Table 2. Reinforced Silicone Rubber Tape

PART NUMBER	CAGE	WIDTH (INCH)
S-80 S-5025	07099	1/2
S-5025	07099	1/2
TARE COMES BUDOUS OUTSUPE DIAMETER 2 DICHES		

TAPE COMES IN ROLLS OUTSIDE DIAMETER 3 INCHES.

TEMPERATURE RANGE: -65° TO +300°F

d. If necessary, solder wire mesh tape to metal braid. See figure 19.

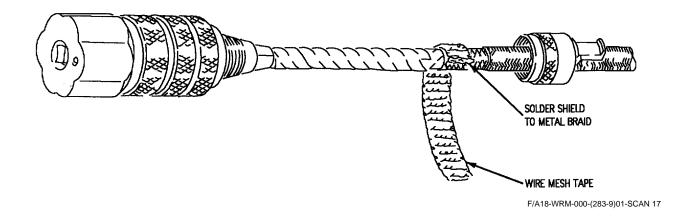


Figure 19. Soldering Wire Mesh Tape to Shield

Table 3. Wire Mesh Tape

PART NUMBER	CAGE	WIDTH (INCH) NOMINAL	THICKNESS (INCH) NOMINAL	WIRE DIAMETER (INCH)
SC61298	OBKF2	1.000	1/64	.7/128 (35 GAGE)

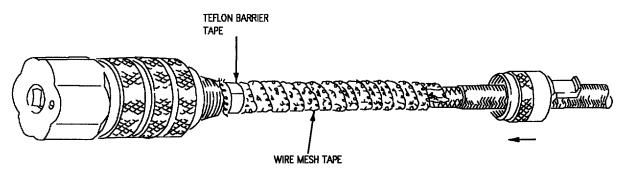
TAPE COMES IN ROLLS OUTSIDE DIAMETER 3 INCHES.

TEMPERATURE RANGE: -65° TO +300°F

NOTE

Wrap wire mesh tape in same direction as ferrule/clamp screws onto adapter/backshell.

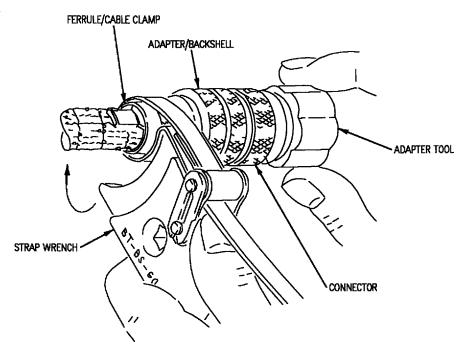
e. Wrap wire mesh tape with a 50 percent overlap and secure in place with teflon barrier tape. See figure 20.



F/A18-WRM-000-(283-10)01-SCAN

Figure 20. Securing Wire Mesh Tape Wrap

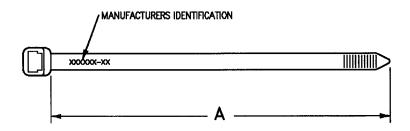
f. Install ferrule/cable clamp and tighten with strap wrench. See figure 21.



F/A18-WRM-000-(281-7)01-SCAN 25

Figure 21. Ferrule/Cable Clamp Installation

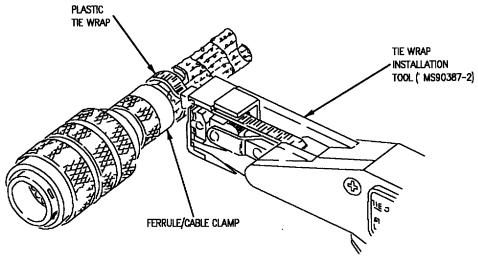
Table 4. Plastic Tie Down Strap



F/A-18-WRM-(510-1)01-CATI

PART NUMBER	LENGTH A (INCH)	CONNECTOR SHELL SIZE	MS90387-1 TOOL TENSION SETTING	MILITARY SPECIFICATION
PLT-2S-CP30 PLT4H-C30 SST-2H-C30	6-1/32 12.00 7-1/2	8 THRU 19 20 THRU 25 20 THRU 25	6 8 8	MIL-S-23190 MIL-S-23190 MIL-S-23190
TEMPERATURE RANGE: -65° TO +300°F				

g. Install plastic tie wrap with tie wrap installation tool. See figure 22.

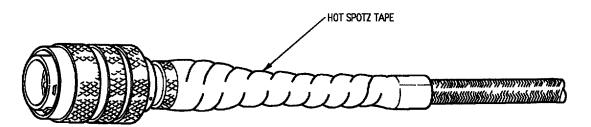


F/A18-WRM-000-(281-8)01-SCAN 21

Figure 22. Securing Ferrule/Cable Clamp

h. Wrap Hot Stopz thermal barrier tape one complete turn around connector backshell, do not cover backshell drain holes. Continue wrapping with a 50% overlap. Wrap back over exposed wiring onto harness

braid about 1/2 inch. Terminate tape by wrapping one full turn around and perpendicular to cable axis. See figure 23.



F/A18-WRM-000-(283-14)01-CATI

Figure 23. Securing Hot Spotz Tape Boot

Table 5. Hot Spotz Tape

PART NUMBER	CAGE	WIDTH (INCH)
AF100A	62088	1
AF150A	62088	1 1/2

TAPE COMES IN ROLLS COLOR - SILVER

TEMPERATURE RANGE; -178° TO +500°F

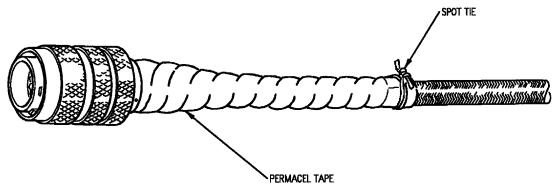
NOTE

Wrap permacel tape in same direction as hot spotz tape was applied.

i. Wrap permacel tape over hot spotz tape beginning with one complete turn around connector backshell, do not cover backshell drain holes. Continue

wrapping with a 50% overlap, ending wrap where hot spotz tape ended. Terminate tape by wrapping one full turn around and perpendicular to cable axis.

j. Secure in place with spot tie lacing tape. After tying tape, apply enough silicone varnish to secure knot and cover the cut ends. See figure 24.



F/A18-WRM-000-(283-15)01-CATI

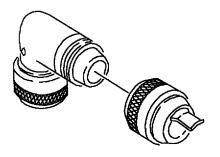
Figure 24. Securing Permacel Tape Boot

Table 6. Permacel Tape

PART NUMBER	CAGE	WIDTH (INCH)
2650	32132	1

SELF BONDING TAPE COMES IN ROLLS COLOR - RED

TEMPERATURE RANGE; -178° TO +500°F



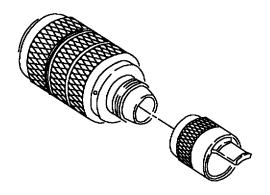
F/A-18-WRM-(351-1)01-SCAN

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
1P-P001	G7056-15-NF	169 00	CM389L-15
1P-R002	G7056-15-NF	169 00	CM389L-15
1 22P-P030	G7925-13	190 00	CM389L-13
22P-P030	G7925-13	168 00	CM389T-13A
6 22P-S025	G7056-11-NF	169 00	CM389L-11
22P-T022	G7056-9-NF	169 00	CM389L-9
1 24P-S009	G7925-11	190 00	CM389L-11
24P-S009	G7925-11	168 00	CM389T-11A
24P-T010	G7925-11	190 00	CM389L-11
24P-T010	G7925-11	168 00	CM389T-11A
3P-P006	G7056-11-NF	169 00	CM389L-11
3P-P010	G7056-9-NF	169 00	CM389L-9
3P-P064	G7056-9-NF	169 00	CM389L-9
3P-R007	G7056-11-NF	169 00	CM389L-11
7 3P-R011	G7056-9-NF	169 00	CM389L-9
8 3P-R011	G7057-9-1NF	169 00	CM389L-9
3P-R065	G7056-9-NF	169 00	CM389L-9
3 4P-P010	G7925-11	190 00	CM389L-11
4P-P010	G7925-13	190 00	CM389L-13
5 4P-P010	G7925-13	168 00	CM389L-13
5J-R112	G7056-9-NF	172 00	CM389L-9
5P-P113	G7056-11-NF	169 00	CM389L-11
5P-R114	G7056-11-NF	169 00	CM389L-11
1 52J-P105	G7925-21	190 00	CM389L-21
2 52J-P105	G7925-21	168 00	CM389L-21
1 52J-P125	G7925-15	190 00	CM389L-15
2 52J-P125	G7925-15	168 00	BT-J-142
52J-R104	G7925-21	190 00	CM389L-21
2 52J-R104	G7925-21	168 00	BT-J-150
3 52J-R124	G7925-11	190 00	BT-J-133
52J-R124	G7925-13	190 00	BT-J-133
2 52J-R124	G7925-13	168 00	BT-J-133
			1

Figure 25. G7056 and G7925 EMI Backshells (Sheet 1)

Reference Designation to Backshell Data Index (Continued)

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER	
1 52J-T108	G7925-21	190 00	CM389L-21	
2 52J-T108	G7925-21	168 00	BT-J-150	
1 52P-P103	G7925-21	190 00	CM389L-21	
2 52P-P103	G7925-21	168 00	CM389T-21A	
52P-P105	G7925-21	190 00	CM389L-21	
2 52P-P105	G7925-21	168 00	CM389T-21A	
52P-R102	G7925-23	190 00	CM389L-23	
2 52P-R102	G7925-23	168 00	CM389T-23A	
1 52P-R104	G7925-21	190 00	CM389L-21	
2 52P-R104	G7925-21	168 00	CM389T-21A	
1 161353 THRU 161761 2 161924 AND UP. 3 161353 THRU 161521. 4 161522 THRU 161761. 5 161522 AND UP. 6 161702 AND UP. 7 163092 AND UP. 8 161353 THRU 162909.				



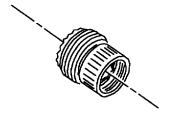
F/A-18-WRM-(351-2)01-SCAN

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
		100.00	
22J-S030	G7924-13	190 00	CM389L-13
2 22J-S030	G7924-13	168 00	BT-J-139
22P-S024	G7057-9-1NF	169 00	CM389L-9
22P-S027	G7924-9-1	190 00	CM389L-9
2 22P-S027	G7924-9-1	168 00	CM389T-9A
1 24P-T008	G7924-11-1	190 00	CM389L-11
2 24P-T008	G7924-11-1	168 00	CM389T-11A
3P-P055	G7057-9-1NF	169 00	CM389L-9
3P-R056	G7057-9-1NF	169 00	CM389L-9
2 4P-P009	G7924-13	168 00	CM389L-13
3 4P-P009	G7924-11-1	190 00	CM389L-11
4P-P009	G7924-13	190 00	CM389L-13
2 4P-P021	G7924-13	168 00	CM389L-13
3 4P-P021	G7924-11-1	190 00	CM389L-11
4P-P021	G7924-13	190 00	CM389L-13
2 4P-R015	G7924-13	168 00	CM389L-13
3 4P-R015	G7924-11-1	190 00	CM389L-11
4P-R015	G7924-13	190 00	CM389L-13
2 4P-R016	G7924-13	168 00	CM389L-13
3 4P-R016	G7924-11-1	190 00	CM389L-11
4P-R016	G7924-13	190 00	CM389L-13
2 4P-R022	G7924-13	168 00	CM389L-13
3 4P-R022	G7924-11-1	190 00	CM389L-11
4P-R022	G7924-13	190 00	CM389L-13
5J-P111	G7057-9-1NF	172 00	CM389L-9
3 5P-P071	G7057-13-NF	169 00	CM389L-11
5 5P-P071	G7057-13-NF	169 00	CM389L-11
52P-P119	G7057-15-1NF	169 00	CM389L-15
52P-R120	G7057-15-1NF	169 00	CM389L-15
		1	

Figure 26. G7057 and G7924 EMI Backshells (Sheet 1)

Reference Designation to Backshell Data Index (Continued)

REFERENCE	BACKSHELL	REFERENCE WORK	TOOL CASE
DESIGNATION		PACKAGE	TOOL NUMBER
52P-S112	G7924-21	190 00	M389L-21
2 52P-S112	G7924-21	168 00	CM389T-21A
1 161353 THRU 161761 2 161924 AND UP. 3 161353 THRU 161521 4 161522 THRU 161761 5 161522 AND UP.			



F/A18-WRM-000-(1131-1)01-SCAN 10

Reference Designation to Adapter Data Index

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER	
1 4P-P009	S2163-6567-30S	190 00	CM389L-13	
2 4P-P009	S2163-6567-30S	168 00	CM389L-13	
1 4P-P010	S2163-6567-30S	190 00	CM389L-13	
2 4P-P010	S2163-6567-30S	168 00	CM389L-13	
1 4P-P021	S2163-6567-30S	190 00	CM389L-13	
2 4P-P021	S2163-6567-30S	168 00	CM389L-13	
1 4P-R015	S2163-6567-30S	190 00	CM389L-13	
2 4P-R015	S2163-6567-30S	168 00	CM389L-13	
1 4P-R016	S2163-6567-30S	190 00	CM389L-13	
2 4P-R016	S2163-6567-30S	168 00	CM389L-13	
1 4P-R022	S2163-6567-30S	190 00	CM389L-13	
2 4P-R022	S2163-6567-30S	168 00	CM389L-13	
5P-P071	S2160-0609-34	169 00	CM389L-13	
52J-R124	S2163-6567-30S	168 00	BT-J-133	

1 161522 THRU 161761.

2 161924 AND UF

Figure 27. S2160 and S2163 Adapters

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

PROTECTIVE BOOT INSTALLATION FOR ENVIRONMENTAL TYPE CONNECTORS WITH METAL CABLE CLAMPS

Reference Material

Electrical System	C-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00

Alphabetical Index

Subject	Page No.
Adapter Tool Mating, Figure 2	5
CM Adapter Tools	4
CM Adapter Tool Part Numbering System, Figure 1	4
Cable Clamp Versus Spacer, Table 1	12
Disassembly Procedure	9
GTR23 Backshell, Figure 17	16
Installing Cable Clamp, Figure 10	11
Installing Saddle Clamp, Figure 11	11
Introduction	2
J1305 Backshell, Figure 18	17
Loosening Position of Wrench, Figure 5	8
Materials Required	2
MS27291-6 Backshell	18
MS27506BXX-X and M85049/49-2-8W Backshells, Figure 20	19
MS27669/BXX-X and M85049/57-01W Backshells, Figure 21	20
MS3188C09A Backshell, Figure 22	21
M81511-13-XXXX Backshell, Figure 23	22
M85049/51-X-XXX Backshell, Figure 24	23
M85049/52-X-XXX Backshell, Figure 25	24
M85049/55-22W Backshell, Figure 26	25
Positioning Reinforced Silicone Rubber Tape, Figure 14	14
Procedure	4
Reassembly Procedure	11
Reference Designation to Figure Number Index	3
Reinforced Silicone Rubber Tape, Table 3	13
Remove Saddle Clamps, Figure 6	9
Removing Cable Clamp, Figure 9	10
Securing Silicone Rubber Tape Boot, Figure 16	15
Silicone Rubber Tape, Table 2	13

Alphabetical Index (Continued)

Subject	Page No
Silicone Rubber Tape and Reinforced Silicone Rubber Tape Boot Removal, Figure 8	10
Spacers for Metal to Metal Contact, Figure 12	12
Spot Tie Removal, Figure 7	9
Strap Wrench	6
Strap Wrench Setup and Adjustment, Figure 3	6
Support Equipment Required	2
S1720-03-30S-S and S1841-XX-XXX Backshells, Figure 27	26
S1842-XX-XXX Backshell, Figure 28	27
Tightening Position of Wrench, Figure 4	7
Wrapping Silicone Rubber Tape, Figure 15	15
Wrapping Silicone Rubber Tape and Reinforced Silicone Rudder Tape Buildup, Figure 13	14
17541-X-XXX Backshell, Figure 29	28
380NE083NF7 Backshell, Figure 30	29
380NE083T3 Backshell Figure 31	30

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 19	-	Addition of a Second Shoot Light Power Supply Connector (WUC 44314)	1 Oct 93	-
F/A-18 AFC 27	-	Improvement of Leading Edge Flap Design (ECP-MDA-F/A-18-00044)	15 Mar 87	-
F/A-18 AFC 48	8 Apr 86	Alternating Current Bus Isolation (ECP MDA-F/A-18-00121)	1 Sep 86	-
F/A-18 AFC 49	31 Jan 86	Addition of Sealed Lead Acid Battery (ECP MDA-F/A-18-00074)	1 Sep 86	-

1. INTRODUCTION.

2. This work package explains the procedures for removing and installing protective boots and metal cable clamps.

Support Equipment Required

Designation	Nomenclature
3308AS100	Repair Set-Wire and Connector

Materials Required

Specification or Part Number	Nomenclature
G	C''. D.11 T
See Table 2	Silicone Rubber Tape
See Table 3	Reinforced Silicone
	Rubber Tape
See Table 1	Cable Clamp Versus
	Spacer
MIL-T-43435	Lacing Tape
TYPE-2 SIZE-3	
FINISH-C	

Reference Designation to Figure Number Index

Reference Designation to Figure Number Index (Continued)

Reference Designation	Figure No.	Reference Designation	Figure No.
	J		J
1J-G089	25	4 64P-E001Q	25
23 1P-A019	30	5 65P-K003	25
1P-A135	24	21 65P-L003	25
2 1P-A135	25	14 65P-P001A	24
23 1P-C109	30	15 65P-P001B	24
10P-P003	25	14 65P-R002A	24
10P-R004	25	15 65P-R002B	24
2J-P015	28	67P-T001A	25
22J-S027	28	69P-F001B	24
24P-M002	28	70P-E005	24
24P-N006	27	71P-B001B	24
24P-N021	27	72P-A002B	25
24P-P003	27	72P-B001A	30
24P-P005	27	74P-B001A	17
24P-P007	27	74P-F002A	17
24P-R004	27	74P-F002B	23
33P-J002	21	76P-J008A	24
33P-J007	29	76P-J008B	22
6 33P-J015	17	9 77J-G002	24
24 33P-J015	23	10 77J-G002	25
33P-L017	29	11 79P-E021A	24
5 33P-L020	17	12 79P-L021A	25
4P-T109A	27	8P-J020	29
5 4P-T109B	20	8P-J021	29
21 4P-T109B	27	8P-K126	29
4P-T109C	27	19 8P-L080A	20
4P-T109D	27	8P-L118	31
52J-P103	27	80P-H001B	18
7 52J-P112	27	80P-J002B	18
8 52J-P112	28	5 80P-K019B	18
52J-R102	27	5 80P-L017B	18
22 52P-H075	21	18 84P-C026A	21
52P-T108	27	20 84P-M021A	21
5 61J-R034	20	18 84P-M021B	21
17 61P-B185	24	84P-U013B	21
16 61P-B185	25	84P-V014B	21
61P-E009A	24		21
21 61P-F034	20	<u>LEGEND</u>	
61P-U045	20		
61P-V046	20	1 62394 AND UP, ALSO 161702 TF	
3 62P-B014A	21	161987 AFTER F18 AFC 48; F/A-	
3 64P-E001A	26	THRU 161528 AFTER F18 AFC 4	
4 64P-E001A	24	2 161702 THRU 161987 BEFORE 1	F18 AFC 48.
3 64P-E001B	26	3 161702 AND UP.	
4 64P-E001B	24	4 161353 THRU 161528.	
13 64P-E001G	25	5 F/A-18B.	
3 64P-E001Q	19		
0.1 20019	17		

Reference Designation to Figure Number Index (Continued)

Reference Designation Figure No.

6 161360 AND UP.

- 7 161353 THRU 161705, AND 161707.
- 8 161706, AND 161708 AND UP.
- 9 F/A-18A 162394 AND UP.
- 10 F/A-18A 161353 THRU 161987.
- 11 F/A-18B 161704 AND UP.
- 12 F/A-18A 161702 AND UP.
- 13 161353 THRU 161528; ALSO 161702 THRU 163175 BEFORE F18 AFC 50.
- 14 161353 THRU 161521.
- 15 F/A-18A 161522 AND UP, F/A-18B 161704 THRU 161947, 162836 AND UP.
- 161925 AND UP.
- 17 161353 THRU 161924.
- 18 161520 AND UP; ALSO 161353 THRU 161519 AFTER F18 AFC 27.
- 19 161353 THRU 161359 AFTER F18 AFC 19.

Reference Designation to Figure Number Index (Continued)

Reference Designation

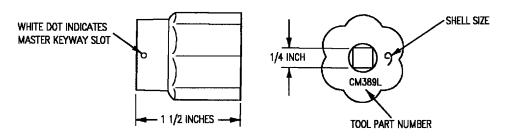
Figure No.

- 20 F/A-18A 161353 THRU 161519 AFTER F18 AFC 27.
- 21 F/A-18A.
- 22 161716 AND UP.
- 23 F/A-18A 162394 AND UP, ALSO 161353 THRU 161987 AFTER F18 AFC 48; F/A-18B 162402 AND UP, ALSO 161354 THRU 161947 AFTER F18 AFC 48.
- 24 161353 THRU 161359.

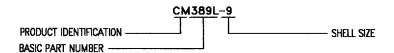
3. PROCEDURE.

4. CM ADAPTER TOOLS.

a. Select tool part number to shell size from tool data in reference designation to backshell data index for specific cable clamp. See figure 1.



MIL-C-38999 SERIES 1



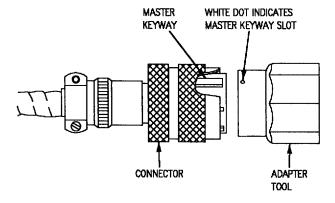
F/A-18-WRM-(500-18)02-CATI

Figure 1. CM Adapter Tool Part Numbering System



White dot on adapter tool must be in line with master key of connector before insertion. Spinning the adapter tool onto connector until it slips into place causes unnecessary wear to tools, keys and keyways.

b. Mate adapter tool to connector, see figure 2.



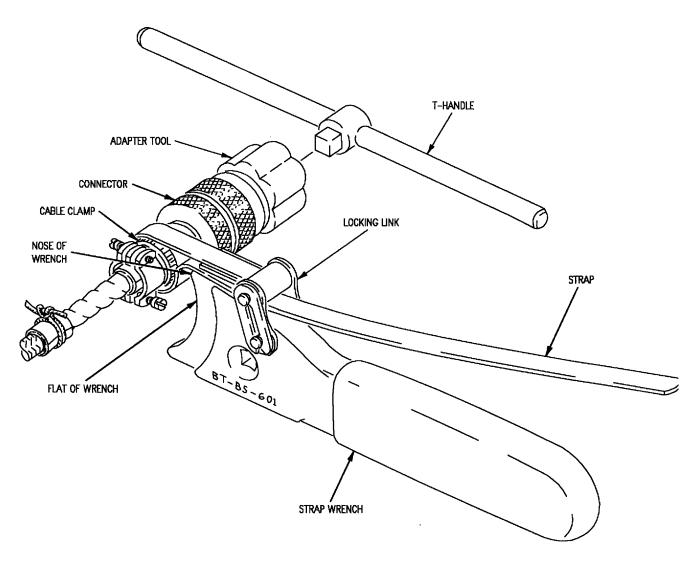
F/A-18-WRM-(851-1)02-CATI

Figure 2. Adapter Tool Mating

5. STRAP WRENCH. NOTE

a. Install the strap around part to be tightened or loosened. Draw the strap tight and through the locking link so the cable clamp and strap rests on nose of wrench, see figure 3.

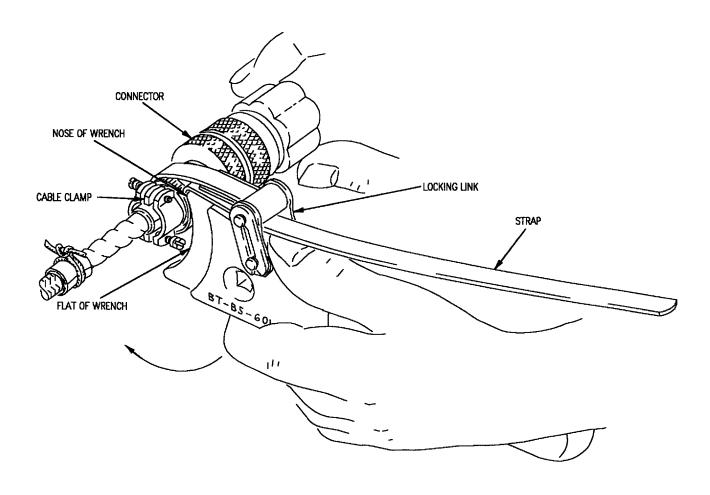
T-Handle can be used for additional gripping force to adapter if required.



F/A-18-WRM-(852-1)02-SCAN

Figure 3. Strap Wrench Setup and Adjustment

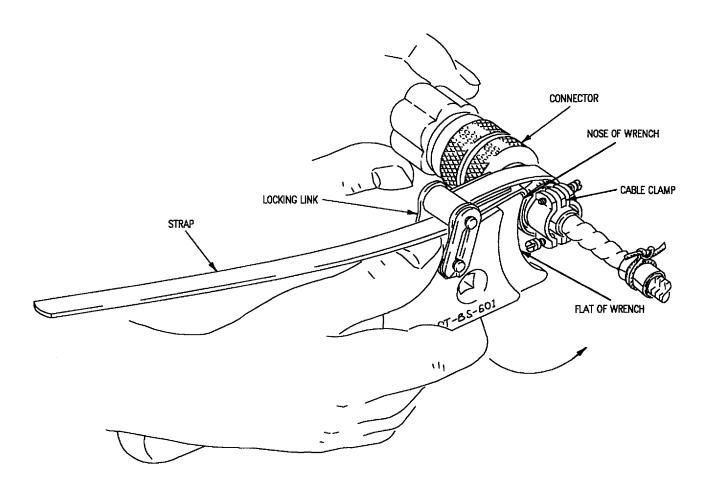
b. To tighten clamp, apply force in a clockwise direction as viewed from the rear of the connector. The clamp and strap are tucked beneath the nose of the wrench and against the flat of the wrench, see figure 4.



F/A-18-WRM-(852-2)02-SCAN

Figure 4. Tightening Position of Wrench

c. To loosen clamp, turn counterclockwise as viewed from the rear of the connector see figure 5.



F/A-18-WRM-(852-3)02-SCAN

Figure 5. Loosening Position of Wrench

6. DISASSEMBLY PROCEDURE.

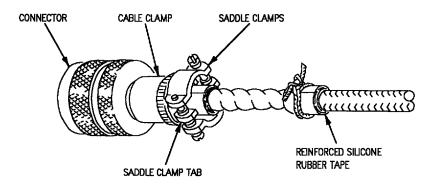
CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

NOTE

If necessary for metal to metal contact, spacers will be used between the saddle clamps and the saddle clamp tabs. When disassembling backshells keep spacers for reuse.

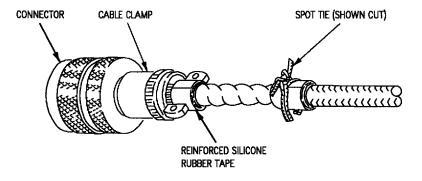
a. Loosen saddle clamp screws, if necessary, remove and keep for reuse see figure 6.



F/A-18-WRM-(852-4)02-SCAN

Figure 6. Remove Saddle Clamps

b. Cut and remove spot tie see figure 7.



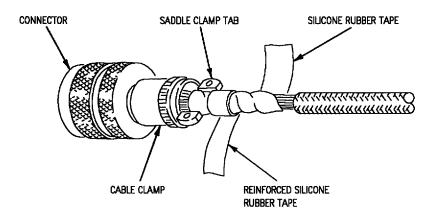
F/A-18-WRM-(852-5)02-SCAN

Figure 7. Spot Tie Removal



When cutting boot material with a sharp tool extreme care must be taken not to nick or scrape the wire insulation beneath the cut.

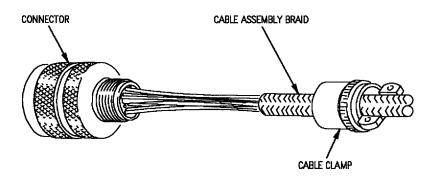
c. Cut or unwrap silicone rubber tape and reinforced silicone rubber tape see figure 8.



F/A-18-WRM-(852-6)02-SCAN

Figure 8. Silicone Rubber Tape and Reinforced Silicone Rubber Tape Boot Removal

d. Loosen and remove cable clamp from connector and slide back onto cable assembly braid see figure 9.

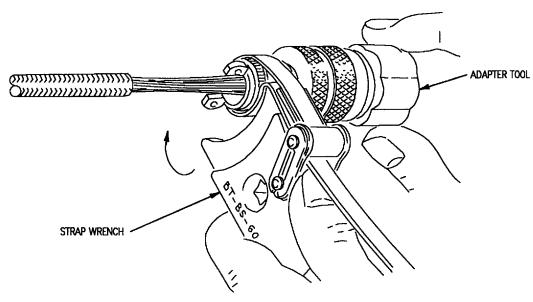


F/A-18-WRM-(852-7)02-SCAN

Figure 9. Removing Cable Clamp

7. REASSEMBLY PROCEDURE

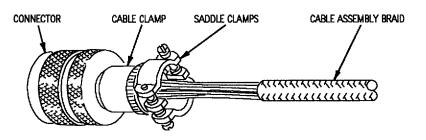
a. Hand tighten cable clamp onto connector, tighten an additional quarter turn with wrench, see figure 10.



F/A-18-WRM-(852-8)02-SCAN

Figure 10. Installing Cable Clamp

b. Loosely install saddle clamps with saddle clamp screws. See figure $11. \,$



F/A-18-WRM-(852-9)02-SCAN

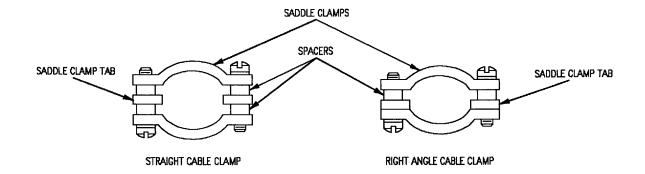
Figure 11. Installing Saddle Clamps

NOTE

Make sure the clamp jaws make metal to metal contact.

c. The tape buildup for metal clamps shall be applied to allow metal to metal contact of saddle clamp

tabs when fully tightened. If cable assembly is too large to allow metal to metal contact, install spacers (table 1) on screws to create needed space. Use two spacers of equal length on right angle cable clamps, and four spacers of equal length on straight strain relief cable clamps. See figure 12.



F/A-18-WRM-(852-10)02-SCAN

Figure 12. Spacers for Metal to Metal Contact

Table 1. Cable Clamp Versus Spacer

Part Number	Spacer Number
В22АС-Н	NAS43DD
G7165B	NAS43DD
MS27291 *	NAS43DD
MS27506*** *	NAS43DD
MS3188****	NAS43DD
MS3417	NAS43DD
MS3418	NAS43DD
MS3437	NAS43DD
M38999-7 ****	NAS43DD
M38999-8 ****	NAS43DD
M81511 ** ****	NAS43DD
SE54C0703A59	NAS43DD
SE6C0703A125-59	NAS43DD
ST5M1660 **	NAS1057T
S1720-03-30S-S	NAS1057T
S1841-65-30S	NAS1057T
S1841-72-30S	NAS1057T
S1841-74-30S	NAS1057T
S1842-64-30S	NAS1057T
S1842-65-30S	NAS1057T
S1842-71-30S	NAS1057T
S1842-72-30S	NAS1057T
S1855-6409-30SD	NAS1057T
S1855-6511-30SD	NAS1057T

Table 1. Cable Clamp Versus Spacer (Continued)

Part Number	Spacer Number
S1855-6713-30SD	NAS1057T
S1855-6915-30SD	NAS1057T
S1855-7017-30SD	NAS1057T
S1855-7119-30SD	NAS1057T
S1855-7119-30SD	NAS1057T
S1855-7221-30SD	NAS1057T
S1855-7423-30SD	NAS1057T
S1855-7425-30SD	NAS1057T
S2015-18R30SD	NAS1057T
17063-7-023	NAS43DD
17063-19-023	NAS43DD
17541-3	NAS43DD
17541-3-023	NAS43DD
5M1661 ** *	NAS1057T

Disregard "*" part of part number. Use spacer(s) with hole size no. 6 or no. 10. Correct fit to the bundle can be achieved by using the thickness: 7/64 inches, 1/8 inches, and 1/4 inches.

Table 2. Silicone Rubber Tape

PART NUMBER	CAGE	WIDTH (INCH)
MIL-I-46852 TYPE-2, 1.000 IN.	38138	1.000
BLK	07099	1.000

SELF - BONDING

TAPE COMES IN ROLLS

COLOR - BLACK

TEMPERATURE RANGE: -178° TO +500°F

Table 3. Reinforced Silicone Rubber Tape

PART NUMBER	CAGE	WIDTH (INCH)
S-5025	07099	1/2
S-80	07099	1/2

REINFORCED WITH FIBERGLASS

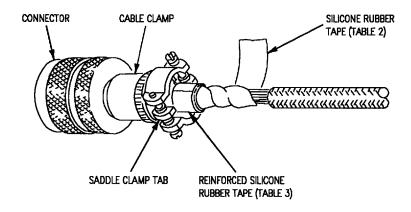
SELF - BONDING COLOR - BLACK

TEMPERATURE RANGE: -178° TO +500°F

NOTE

For best results when applying silicone rubber tape, hands should be free of dirt and oil. The leading edge of silicone rubber tape should protrude through strain relief clamp hardware 1/8 inch when assembly is complete.

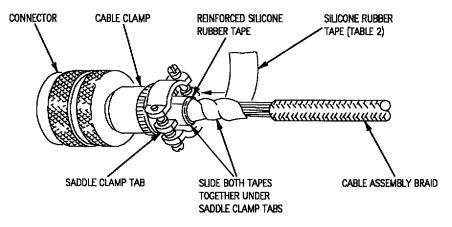
d. Wrap 1 or 2 turns of silicone rubber tape over exposed wires and build up layers of reinforced silicone rubber tape wrapped over the silicone rubber tape near the clamp. See figure 13.



F/A-18-WRM-(852-11)02-SCAN

Figure 13. Wrapping Silicone Rubber Tape and Reinforced Silicone Rubber Tape
Buildup

e. Slide tape under clamp. See figure 14.



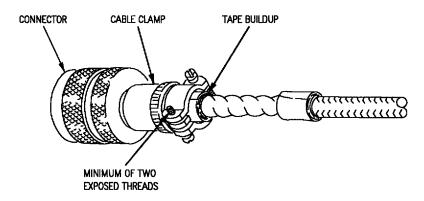
F/A-18-WRM-(852-12)02-SCAN

Figure 14. Positioning Reinforced Silicone Rubber Tape



The cable clamp shall not be in direct contact with cable/harness assembly. The amount of tape under clamp saddle must be at least 1 layer, plus the amount needed to build up for a secure fit of clamp to bundle when screws are tightened and metal to metal contact is obtained.

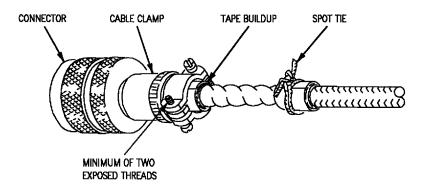
f. Continue to wrap silicone rubber tape over exposed wire and onto cable assembly braid the width of the tape, wrap tape back in the direction of the connector one full turn. See figure 15.



F/A-18-WRM-(852-13)02-SCAN

Figure 15. Wrapping Silicone Rubber Tape

g. Spot tie silicone rubber tape end as shown. See figure 16.



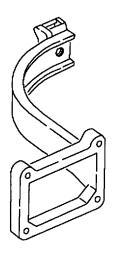
F/A-18-WRM-(852-14)02-SCAN

Figure 16. Securing Silicone Rubber Tape Boot



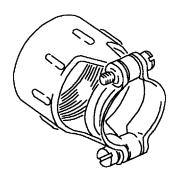
F/A-18-WRM-(870-3)02-SCAN

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER
33P-J015 2 33P-L020 74P-B001A 74P-F002A	GTR23-14B GTR23-14B GTR23-14B GTR23-14B	165 00 165 00 165 00 165 00	CM815S-14A CM815S-14A CM815S-14A CM815S-14A
161360 AND UP. 2 F/A-18B.			



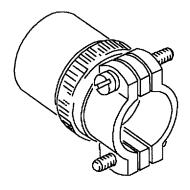
F/A-18-WRM-(870-15)02-SCAN

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER
80P-H001B 80P-J002B 1 80P-K019B 1 80P-L017B	J1305BR-8 J1305BR-8 J1305BR-8 J1305BR-8	200 00 200 00 200 00 200 00	None None None
1 F/A-18B.	•		



F/A-18-WRM-(870-19)02-SCAN

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER
64P-E001Q	MS27291-6	182 00	BT837-22-A
161702 AND UP.			



F/A-18-WRM-(870-4)02-SCAN

Reference Designation to Backshell Data Index

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER	
1 4P-T109B	M85049/49-2-8W	169 00	CM389L-9	
1 61J-R034	MS27506B14-2	172 00		
3 61P-F034	MS27506B15-1	169 00	CM389L-15	
61P-U045	MS27506B11-1	169 00	CM389L-11	
61P-V046	MS27506B11-1	169 00	CM389L-11	
2 8P-L080A	MS27506B12-2	169 00	CM389L-13	
1 F/A-18B.				
2 161353 THRU 1613	359 AFTER F18 AFC 19.			

3 F/A-18A.

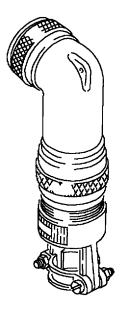
Figure 20. MS27506BXX-X and M85049/49-2-8W Backshells



F/A-18-WRM-(870-2)02-SCAN

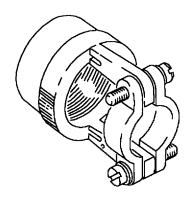
REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER
1 33P-J002 2 33P-J002 5 52P-H075 6 62P-B014A 3 84P-C026A 4 84P-M021A 3 84P-M021B 84P-U013B 84P-V014B	MS27669B10 M85049/57-10W MS27669B14 MS27669B12 MS27669B12 MS27669B12 MS27669B12 MS27669B12 MS27669B12	169 00 169 00 169 00 169 00 169 00 169 00 169 00 169 00	CM389L-11 CM389L-15 CM389L-15 CM389L-13 CM389L-13 CM389L-13 CM389L-13 CM389L-15
1 F/A-18B 2 F/A-18A 3 161520 AND UP; ALSO 161353 THRU 161519 AFTER F18 AFC 27. 4 F/A-18A 161353 THRU 161519 AFTER F18 AFC 27. 5 161716 AND UP. 6 161702 AND UP.			

Figure 21. MS27669/BXX-X and M85049/57-01W Backshells



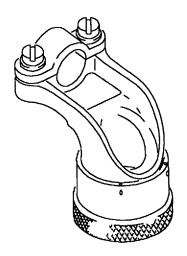
F/A-18-WRM-(870-5)02-SCAN

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER
76P-J008B	MS3188C09A	161 00	CM264-14



F/18-WRM-WRM-(870-7)02-SCAN

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER	
33P-J015 74P-F002B	M81511-13-14A1 81511-13-14A1	165 00 165 00	CM815S-14A CM815S-14A	
1 161353 THRU 161359.				



F/18-WRM-WRM-(870-8)02-SCAN

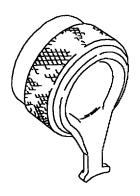
REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER
1 1P-A135	M85049/51-1-16W	157 00	CM5015-16
7 61P-B185	M85049/51-1-8W	161 00	CM264-8
61P-E009A	M85049/51-1-24W	161 00	CM264-24
2 64P-E001A	M85049/51-1-22W	157 00	CM5015-22
2 64P-E001B	M85049/51-1-22W	157 00	CM5015-27
5 65P-P001A	M85049/51-1-12W	161 00	CM264-12
65P-P001B	M85049/51-1-12W	161 00	CM264-12
5 65P-R002A	M85049/51-1-12W	161 00	CM264-12
65P-R002B	M85049/51-1-12W	161 00	CM264-12
69P-F001B	M85049/51-1-22W	161 00	CM264-22
70P-E005	M85049/51-1-18W	157 00	CM5015-18
71P-B001B	M85049/51-1-16W	161 00	CM264-16
76P-J008A	M85049/51-1-16W	161 00	CM264-16
3 77J-G002	M85049/51-1-16W	161 00	CM264-16
4 79P-E021A	M85049/51-1-22A	161 00	CM264-22
1 162394 AND UP; ALSO 161702 THRU 161987 AFTER F18 AFC 48; ALSO F/A-18A 161353 THRU 161528 AFTER F18 AFC 49. 2 161353 THRU 161528. 3 F/A-18A 162394 AND UP. 4 F/A-18B 161704 AND UP. 5 161353 THRU 161521. 6 F/A-18A 161522 AND UP; F/A-18B 161704 THRU 161947, 162836 AND UP. 7 161353 THRU 161924.			
/ F 101333 1TRU 101924.			

Figure 24. M85049/51-X-XXX Backshell



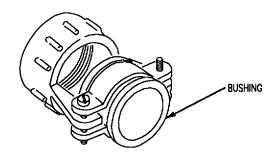
F/A-18-WRM-(870-6)02-SCAN

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER
1J-G089	M85049/52-1-18W	157 00	CM5015-18
1P-A135	M85049/52-1-16W	157 00	CM5015-16
10P-P003	M85049/52-1-14W	157 00	CM5015-14
10P-R004	M85049/52-1-14W	157 00	CM5015-14
5 61P-B185	M85049/52-1-8W	161 00	CM264-8
4 64P-E001G	M85049/52-1-10W	161 00	CM264-10
64P-E001Q	M85049/52-1-22W	153 00	CM837-22A
7 65P-K003	M85049/52-1-14W	161 00	CM264-14
8 65P-L003	M85049/52-1-14W	161 00	CM264-14
67P-T001A	M85049/52-1-14W	161 00	CM264-14
72P-A002B	M85049/52-1-14W	161 00	CM264-14
2 77J-G002	M85049-52-1-16W	161 00	
3 79P-L021A	M85049/52-1-22W	161 00	CM264-22
1 161702 THRU 161987 BEFORE F18 AFC 48. 2 F/A-18A 161353 THRU 161987. 3 F/A-18A 161702 AND UP. 4 161353 THRU 161528; ALSO 161702 THRU 163175 BEFORE F18 AFC 50. 5 161925 AND UP. 6 161353 THRU 161528. 7 F/A-18B. 8 F/A-18A.			



F/A-18-WRM-(870-20)02-SCAN

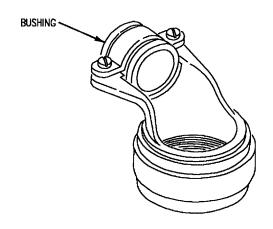
REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER
64P-E001A 64P-E001B	M85049/55-22W M85049/55-22W	157 00 157 00	CM5015-22 CM5015-22
161702 AND UP			



F/18-WRM-WRM-(870-9)02-SCAN

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER
1 24P-N006	S1841-65-30S	168 00	CM389T-11A
24P-N006	S1841-65-30S	190 00	
1 24P-N021	S1841-65-30S	168 00	CM389T-11A
24P-N021	S1841-65-30S	190 00	
1 24P-P003	S1841-65-30S	168 00	CM389T-11A
24P-P003	S1841-65-30S	190 00	
1 24P-P005	S1841-65-30S	168 00	CM389T-11A 22
24P-P005	S1841-65-30S	190 00	
1 24P-P007	S1841-65-30S	168 00	CM389T-11A
24P-P007	S1841-65-30S	190 00	
24P-R004	S1841-65-30S	168 00	CM389T-11A
24P-R004	S1841-65-30S	190 00	
4P-T109A	S1720-03-30S-S	169 00	CM389L-9
5 4P-T109B	S1720-03-30S-S	169 00	CM389L-9
4P-T109C	S1720-03-30S-S	169 00	CM389L-9
4P-T109D	S1720-03-30S-S	169 00	CM389L-9
1 52J-P103	S1841-72-30S	168 00	BT-J-150
2 52J-P103	S1841-72-30S	190 00	
4 52J-P112	S1841-72-30S	190 00	BT389T
1 52J-R102	S1841-74-30S	168 00	BT-J-151
2 52J-R102	S1841-74-30S	190 00	
1 52P-T108	S1841-72-30S	168 00	CM389T-20A
2 52P-T108	S1841-72-30S	190 00	
1 161924 AND UP. 2 161353 THRU 161761 3 F/A-18A 161925 AND F/A-18B 161924 THR 4 161353 THRU 161705 5 F/A-18A.	O UP, U 161947, 162836 AND UP.		

Figure 27. S1720-03-30S-S and S1841-XX-XXX Backshells



F/A-18-WRM-(870-10)02-SCAN

Reference Designation to Backshell Data Index

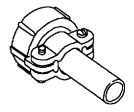
REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER
3 2J-P015	S1842-71-30S	168 00	
1 2J-P015	S1842-71-30S	190 00	
1 22J-S027	S1842-64-30S	190 00	BT-J-130
22J-S027	S1842-64-30S	168 00	BT-J-130
1 24P-M002	S1842-65-30S	190 00	
24P-M002	S1842-65-30S	168 00	CM389T-11A
4 52J-P112	S1842-72-30S	168 00	BT-J-150

- 1 161353 THRU 161761.
- 2 161924 AND UP.
- 3 F/A-18A 161925 AND UP,

F/A-18B 161924 THRU 161947, AND 162836 AND UP.

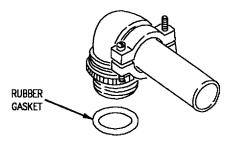
4 161706, AND 161708 AND UP.

Figure 28. S1842-XX-XXX Backshell



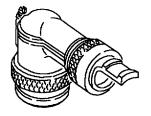
F/A-18-WRM-(870-12)02-SCAN

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER
33P-J007 33P-L017 8P-J020 8P-J021 8P-K126	17541-3-023 17541-3 17541-3-023 17541-3	179 00 179 00 179 00 179 00 179 00	None None None None



F/A-18-WRM-(870-11)02-SCAN

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER
1P-A019 1P-C019 72P-B001A	380NE083NF7 380NE083NF7 380NE083NF7	179 00 179 00 178 00	None None None
F/A-18A 162394 AND UP; ALSO 161353 THRU 161987 AFTER F18 AFC 48 F/A-18B 162402 AND UP; ALSO 161354 THRU 161947 AFTER F18 AFC 48.			



F/A-18-WRM-(870-14)02-SCAN

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL NUMBER
8P-L118	380NE083T3	179 00	None

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

PROTECTIVE BOOT INSTALLATION FOR ENVIRONMENTAL TYPE CONNECTORS WITH S3957XXX-34 MOLDED PLASTIC CABLE CLAMP BACKSHELLS

Reference Material

None

Alphabetical Index

Subject	Page No.
Boot Installation with Electromagnetic Interference (EMI) Application	14
Disassembly Procedure	14
Expandable Sleeving Removal, Figure 8	17
Mini Band Removal From Wire Mesh Tape, Figure 9	17
Mini Band Removal from Cable Clamp, Figure 12	18
Position Expandable Sleeving for Removal, Figure 7	16
Spot Tie and Tape Removal from Wire Mesh Tape, Figure 10	17
Spot Tie Removal, Figure 6	16
Teflon Barrier Tape Removal, Figure 13	19
Wire Mesh Tape Removal, Figure 11	18
Reassembly Procedures	18
Expandable Sleeving, Table 6	25
Folding Expandable Sleeving Onto Cable Assembly, Figure 25	26
Installing EMI Cable Clamp Locking Nut and EMI Cable Clamp	
On Cable Assembly, Figure 14	19
Installing EMI Cable Clamp and EMI Cable Clamp Locking Nut, Figure 15	20
Mini Band Installation to EMI Cable Clamp, Figure 19	22
Mini Band Installation Over Wire Mesh Tape, Figure 23	24
Mini Band, Table 3	22
Positioning Reinforced Silicone Rubber Tape Wrap, Figure 18	22
Protective Tape Wrap Over Mini Band, Figure 20	23
Reinforced Silicone Rubber Tape Installation on EMI Cable Clamp, Figure 17	21
Reinforced Silicone Rubber Tape, Table 2	21
Securing Expandable Sleeving to Cable Assembly, Figure 26	26
Starting Expandable Sleeving, Figure 24	25
Tedlar Tape, Table 5	24
Teflon Barrier Tape Installation, Figure 16	20
Teflon Barrier Tape, Table 1	20
Wire Mesh Tape Installation to Bundle Shield, Figure 21	23
Wire Mesh Tape, Table 4	23
Wire Mesh Tape Wrapping, Figure 22	24

A1-F18AC-WRM-000 Change 4

Alphabetical Index (Continued)

Subject	Page No
Boot Installation With Non (EMI) Application	27
Disassembly Procedure	27
Mini Band Removal From Cable Clamp, Figure 27	27
Tape Removal of Boot Area, Figure 28	28
Reassembly Procedure	27
Installing Cable Clamp Locking Nut and Cable Clamp on Cable Assembly, Figure 29	28
Installing Cable Clamp and Cable Clamp Locking Nut, Figure 30	29
Mini Band Installation to Cable Clamp, Figure 35	31
Positioning Tape Buildup and Spiral Wrap, Figure 34	31
Preparing Silicone Rubber Tape, Figure 31	29
Reinforced Silicone Rubber Tape Installation, Figure 33	30
Silicone Rubber Tape, Table 7	30
Silicone Rubber Tape Installation, Figure 32	30
Tape Wrapping of Boot Area, Figure 36	32
Description	11
General Tooling Procedures	11
CM Adapter Tools	11
Adapter Tool Mating, Figure 2	12
CM Adapter Tool Part Numbering System, Figure 1	12
Strap Wrench	13
Loosening Position of Wrench, Figure 5	15
Strap Wrench Setup and Adjustment, Figure 3	13
Tightening Position of Wrench, Figure 4	14
G8682 Adapter, Figure 40	51
J1317 Adapter, Figure 39	50
Materials Required	11
Reference Designation to Figure Number Index	3
Support Equipment Required	11
S3957AXX-34 Backshells, Figure 41	52
S3957RXX-34 Backshells, Figure 37	33
S3957SXX-34 Backshells, Figure 38	44

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 27	-	Improvement of Leading Edge Flap Design (ECP MDA-F/A-18-00044)	15 Mar 87	-
F/A-18 AFC 48	-	Automatic AC Bus Isolation, Incorporation of	1 Oct 93	-
F/A-18 AFC 49	-	Addition of Sealed Lead Acid Battery	1 Oct 93	-
F/A-18 AFC 39	-	No. 1 Fuel Tank Interconnect Valve Replacement and Fuel Sequencing Modification	1 Oct 93	-
F/A-18 AFC 41	19 Sep 85	Throttle Thrust Sensitivity, Reduction of (ECP MDA-F/A-18-0054C1)	1 Sep 86	-

A1-F18AC-WRM-000 Change 4

Record of Applicable Technical Directives (Continued)

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 53	30 Jun 88	Tanks 1 and 4 Sneak Circuit, Elimination of; Raised Inverted Flight Baffle, Replacement of and Tank 4 Motive Flow Shutoff Valve, Incorporation of	1 Oct 93	-
F/A-18 AFC 54	-	Video Recording Set, Incorporation of	1 Oct 93	-
F/A-18 AFC 57	30 Mar 90	Improved Aircraft Monitor and Control (AMAC), Installation of	1 Oct 93	-
F/A-18 AFC 225	-	Addition of Mux 4 and 5 (ECP MDC-F/A-18-00529)	1 Sep 02	-
F/A-18 AFC 231	-	Addition of Embedded GPS/INS (ECP MDC-F/A-18-00521)	1 Sep 02	-
F/A-18 AFC 253	-	U.S. Naval Reserves A+ Avionics Upgrade; Incorporation of (ECP MDA-F/A-18-0560R1)	1 Sep 02	-
F/A-18 AFC 292	-	U.S. Marine Corps Reserves A+ Avionics Upgrade; Incorporation of (ECP MDA-F/A-18-0583)	1 Sep 02	-

Reference Designation to Figure Number Index		Reference Designation to Figure Number Index (Continued)	
Reference Designation	Figure No.	Reference Designation	Figure No.
38 1J-A153	37	1P-H004	37
25 1P-A138	37	1P-J084	38
38 1P-A153	37	14 1P-J137	37
1P-C005	37	10P-J005	37
1P-C007	37	11 10P-L018	37
1P-C022	37	10P-P006A	37
1P-C023	37	10P-P006B	37
43 1P-C072	38	10P-P008	37
36 1P-C072	37	10P-P010	38
19 1P-C072A	37	10P-R007A	37
32 1P-C072B	37	10P-R007B	37
49 1P-C145	37	10P-R011	37
1P-D006	37	<u>10P-R</u> 012	37
1P-D008	37	49 12P-A004A	37
<u>1P-D024</u>	37	6 12P-D004A	37
25 1P-D035	37	<u>12P-H008</u>	37
19 1P-D035A	37	20 12S-G057	37
32 1P-D035B	37	13P-D003	37
49 1P-D146	37	13P-P004	37
18 1P-D155	37	17J-J008	37

Change 4

Reference Designation to Figure Reference Designation to Figure **Number Index (Continued) Number Index (Continued)** Reference **Figure** Reference **Figure** Designation Designation No. No. 22P-R006 37 17J-U017 37 26 22P-R015A 17J-V018 37 37 26 22P-R015B 21 18J-T014 38 37 19P-J003 37 26 22P-R016 37 39 2P-M010A 37 26 22P-R110 38 52 2P-M010B 37 22P-S018 37 22 2P-N010A 37 37 22P-S019 22 2P-N010B 37 22P-S023 38 2P-P011 38 23P-B002 37 23P-B003 2P-P012 38 38 20J-J003 37 25P-H002 38 11 20J-L013 38 25P-H002 (Adapter) 40 20J-L014 11 25P-K004 38 38 22J-C108 37 25P-K004 (Adapter) 40 7 22J-D096 38 28P-A017 37 22J-E098 37 28P-B015 37 23 22J-F096 38 28P-B016 37 24 22J-K171 37 37 28P-B018 22J-M099 37 3P-E079 37 22P-A087 38 37 3P-H001 11 3P-K002 22P-A088 37 37 39 3P-M008 38 37 22P-A089 22 3P-N008 37 37 22P-A090 22P-D002A 37 33P-H011 37 22P-D002B 37 33P-L016 37 7 22P-D096 38 34P-D011 38 37 5J-G024 22P-E004 37 37 1 22P-E098 5J-P145 37 38 26 5J-R144 ♪ 22P-E098 37 37 23 22P-F096 5P-B019 38 37 22P-H069 37 5P-D009 37 41 5P-E035 22P-J026 37 37 40 5P-E035 22P-J068 37 38 10 22P-K102 11 5P-E053 37 37 11 22P-K114 37 10 5P-E053 38 17 22P-K170 37 5P-F014A 37 17 22P-K171 37 5P-F014B 37 11 22P-L102 37 5P-F029 37 11 22P-L113 7 5P-F035 37 37 24 22P-L170 37 5P-F116 37 22P-M076 38 37 5P-H013 22P-M084 37 5P-H027 38 37 11 5P-K015 22P-M086 37 3 5P-M036 22P-M099 38 38 4 5P-M036 26 22P-N014 37 37 3 5P-N040 26 22P-N017 37 38 4 5P-N040 22P-P005 37 37 22P-P012 38 5P-P069 38

Change 4

Reference Designation to Figure Reference Designation to Figure **Number Index (Continued) Number Index (Continued)** Reference **Figure** Reference **Figure** Designation Designation No. No. 38 5P-P102 37 52J-M069 5P-P136 37 52J-M071 38 37 38 5P-P137 52J-N070 5P-R030 37 52J-N072 38 37 38 5P-R031 52J-P035 5P-R032 37 38 52J-P110 5P-R033 37 52J-P111 38 5P-R034 37 52J-P117 38 37 52J-P123 38 5P-R120 28 52J-P166 5P-T104 37 38 26 52J-R036 37 5P-T106 38 26 52J-R113 52J-B021 37 38 52J-B023 38 52J-R114 38 52J-C022 37 26 52J-R116 38 28 52J-R163 52J-C051 37 37 28 52J-R164 52J-E007 38 37 28 52J-R165 52J-E011 38 37 11 52J-E154 37 52J-U013 38 52J-F001 37 52J-U015 38 26 52J-F003 37 52J-U017 38 26 52J-F006 37 52J-U019 38 54 52J-U045A 52J-G040 38 38 52J-H032 38 52J-V012 38 52J-H033 37 52J-V014 38 52J-H034 38 52J-V016 38 37 52J-V020 38 52J-H039 54 52J-V044A 52J-H046 37 38 2 52J-H048 37 52P-A034 38 52J-H049 37 52P-A046 38 52P-B023 52J-H073 37 38 52J-H083 37 38 52P-B042 52J-H085 37 52P-B156 38 1 52J-H088 38 38 52P-C032 33 52J-H088 37 52P-C033 38 52J-J008 37 38 52P-C039 52J-J028 38 52P-C057A 37 52J-J029 38 37 52P-C057B 52J-J038 37 37 52P-C057C 37 52J-J042 38 52P-C057D 52J-J074 37 52P-C057E 37 37 52J-J086 52P-C057F 37 11 52J-K301 37 15 52P-C057G 37 11 52J-K302 37 37 52P-C085 11 52J-K307 37 52P-C159A 37 52J-L030 37 52P-C159B 37 9 52J-L160 38 37 52P-C159C **→** 52J-L160 37 52P-C159D 37 11 52J-L308 37 37 52P-C159E

Change 4

52P-H083

52P-H084

52P-H087

52P-H089

2 52P-H088

1 52P-H088

Reference Designation to Figure Reference Designation to Figure **Number Index (Continued) Number Index (Continued)** Reference **Figure** Reference **Figure** Designation Designation No. No. 52P-H091 37 52P-C159F 38 11 52P-H098 52P-C159G 37 38 10 52P-H098 49 52P-C161 37 37 52P-D008 37 52P-J053 37 52P-D024A 37 52P-J076 38 52P-D024B 37 52P-J078 38 52P-D024C 37 52P-J080 38 52P-D024D 37 52P-J155 38 11 52P-K303 29 52P-D024E 37 38 11 52P-K304 52P-D026A 38 37 11 52P-K305 38 52P-D026B 37 10 52P-L154 52P-D026C 38 38 11 52P-L309 52P-D026D 38 38 52P-D028 38 52P-M069 37 52P-D029 38 52P-M071 37 37 37 52P-D038 52P-N070 52P-D086 37 52P-N072 37 52P-D092A 37 52P-N118A 37 52P-D092B 37 52P-N118B 37 37 54 52P-P064A 38 52P-D092C 54 52P-P064B 52P-E007 38 38 38 52P-P163 37 52P-E011 28 52P-P164 37 37 52P-E059 54 52P-E059 28 52P-P165 38 38 11 52P-E307 26 52P-R065 37 37 26 52P-F001 54 52P-R066A 37 38 54 52P-R066B 52P-F003 37 38 28 52P-R166 52P-F006 37 37 52P-F030 37 52P-U013 38 52P-F058A 37 52P-U015 38 52P-F058B 37 52P-U017 38 52P-F058C 37 52P-U019 38 37 54 52P-U045A 38 52P-F058D 54 52P-U045B 52P-F058E 37 38 9 52P-F160 38 54 52P-U045C 37 8 52P-F160 54 52P-U045D 37 37 11 52P-F308 38 38 52P-V012 30 52P-H075 38 52P-V014 38 37 52P-H077A 52P-V016 38 52P-H077B 37 52P-V020 38 54 52P-V044A 38 38 52P-H079 52P-H081 37 54 52P-V044B 38

54 52P-V044C

54 52P-V044D

60J-A001A

60J-A001B

61J-A120

61J-P110A

37

37

38

38

38

37

38

38

37

38

37

Change 4

Reference Designation to Figure Reference Designation to Figure **Number Index (Continued) Number Index (Continued)** Reference **Figure** Reference **Figure** Designation Designation No. No. 9 62P-L027 37 37 61J-P110B 26 61J-R111A 1 62P-S012A 37 37 26 61J-R111B 1 62P-T011A 37 37 54 61J-U045 38 64J-E001F 38 54 61J-V044 38 64P-E001F 38 65J-P004 61J-W095A 38 37 65J-R005 61J-W095B 38 37 61P-A020A 37 50 65P-P001A 37 31 65P-P001B 37 37 61P-A020B 50 65P-R002A 61P-A246A 37 37 31 65P-R002B 37 61P-A246B 37 61P-B164 37 66P-F001A 37 13 61P-B184 38 66P-F001B 37 12 61P-B184 37 66P-F001C 37 61P-D033 37 66P-F001D 37 54 66P-F001E 61P-F001A 37 37 54 66P-F001F 61P-F001B 37 37 37 61P-F010A 67P-J002 37 61P-F010B 37 68P-E001A 37 37 68P-E001C 37 61P-J022A 37 55 68P-E011A 37 61P-J022B 55 68P-E011C 61P-J022C 37 38 54 69J-L016 11 61P-K237 38 38 11 61P-L217 54 69P-F016 38 37 7P-K032 54 61P-P014A 37 37 10 7P-L032 54 61P-P014B 37 37 54 61P-P014C 37 7P-S036A 38 5<u>4</u> 61P-P190 37 7P-T009 38 54 61P-R016A 37 70J-A003 38 54 61P-R016B 37 70J-B004 37 54 61P-R016C 37 70P-F001A 37 26 61P-R167 37 70P-F001B 37 54 61P-R191 37 38 75J-N001 61P-W209 38 76P-F001B 37 1 62J-A030E 38 37 76P-F002B ▶ 62J-B029E 38 76P-F004A 37 1 62J-J007 37 54 76P-F041B 38 → 62P-A013A 54 76P-F041E 38 41 54 76P-F041F 1 62P-A030E 38 38 62P-B010A 38 54 76P-F042B 38 38 54 76P-F042E ▶ 62P-B029E 37 62P-E006A 37 54 76P-F042F 37 54 76P-F042G 37 62P-E006B 37 54 76P-F042H 62P-E006C 37 37 **→** 62P-E009K 37 76P-H009A 37 62P-E009L 37 76P-H009B 37 54 76P-H009D 62P-E009M 38 37 11 76P-K032 62P-J008 37 38

Change 4

Reference Designation to Figure Reference Designation to Figure **Number Index (Continued) Number Index (Continued)** Reference **Figure** Reference **Figure** Designation Designation No. No. 11 77P-K001B 57 83P-F018 37 37 10 77P-L001B 54 83P-F022 37 38 35 84J-C026B 56 78P-A014 37 38 35 84J-C026C 78P-E001A 37 38 56 78P-E016K 10 84J-E041 41 38 56 78P-E016M 41 84J-E044 38 10 78P-K005 10 84J-E045 38 38 11 78P-L005 37 84J-E048 38 8 79J-L024 38 84J-F042 37 9 79P-E021B 10 84J-F043 38 38 8 79P-L021B 38 84J-F046 37 11 8J-L098 10 84J-F047 37 38 8P-H052 37 84J-H023 37 8P-J002 38 84J-H024 37 38 8P-J042 84J-H031 37 8P-L001A 38 84J-H034 37 16 84J-H092 8P-L001B 38 38 17 84J-H092 11 8P-L097A 37 37 11 8P-L097B 37 84J-J025A 38 11 8P-L098 37 84J-J025B 38 11 8P-L127 11 84J-J032 37 38 11 80P-L016B 10 84J-J032 38 37 11 80P-L016B (Adapter) 39 84J-J033 37 82P-F001A 37 84J-J093 38 82P-F001C 37 35 84J-J122A 38 54 83J-G003 38 35 84J-J122B 38 54 83J-H023 11 84J-K092 38 37 11 84J-K094 54 83J-L018 37 37 11 84J-L095 83P-E001A 37 37 11 84J-L097A 83P-E001B 37 38 11 84J-L097B 83P-E001C 37 38 37 84J-M051 83P-E001D 38 35 84J-M132 37 37 83P-E001E 35 84J-M133 1 57 ▶ 83P-E001H 37 37 57 83P-E001K 37 84J-N052 38 57 83P-E001L 11 84J-P041 37 38 12 83P-E005 11 84J-P045 37 38 13 83P-E005 38 84J-P053 37 37 38 83P-F002A 84J-P054 83P-F002B 37 84J-P055 37 37 37 83P-F002C 84J-P059 83P-F002D 37 84J-P060 37 37 83P-F002E 84J-P067 37 11 84J-R043 57 83P-F002H 37 38 11 84J-R047 57 83P-F002K 37 38 57 83P-F002L 37 84J-R056 37 83P-F004 37 84J-R057 38 57 83P-F015 37 84J-R058 37

37

A1-F18AC-WRM-000

Change 4

84P-F007B

84P-F042

Reference Designation to Figure Reference Designation to Figure **Number Index (Continued) Number Index (Continued)** Reference **Figure** Reference **Figure** Designation Designation No. No. 37 38 84J-R064 84P-F043 84J-R065 37 84P-F046 37 37 84P-F047 38 84J-R068 84J-S063 38 11 84P-F095 38 84J-U049 38 84P-H003A 37 84P-H003B 38 37 84J-V050 7 84P-C026 38 84P-J104 38 84P-C031 38 48 84P-J122A 38 47 84P-J122A 84P-C034 38 37 10 84P-C092 48 84P-J122B 38 38 47 84P-J122B 37 84P-D012A 37 39 84P-M021A 84P-D012B 37 38 23 84P-M021A 84P-D032 38 37 84P-D033 37 52 84P-M021B 38 23 84P-M021B 84P-D093 38 37 52 84P-M021C 38 38 84P-E041 53 84P-M021D 84P-E044 38 38 84P-M029A 37 84P-E045 38 35 84P-M029B 84P-E048 38 38 11 84P-E092 38 39 84P-M029B 37 23 84P-M029C 11 84P-E094 37 38 45 84P-M029C 84P-F001A 37 37 84P-F001B 37 84P-M029D 37 84P-F001D 37 84P-M051 37 84P-F001F 37 35 84P-M110A 38 46 84P-M110B 37 38 84P-F001H 35 84P-M132 84P-F001J 37 37 46 84P-M133 37 84P-F001L 37 84P-F001P 37 84P-N052 37 51 84P-S017A 84P-F002A 37 37 51 84P-S017B 37 84P-F002B 37 84P-S055 84P-F002D 37 38 51 84P-T018A 37 37 84P-F002F 51 84P-T018B 84P-F002H 37 37 84P-F002J 37 84P-T058 37 84P-F002L 37 84P-U013A 38 37 37 84P-F002P 84P-U013C 37 37 84P-F004A 84P-U013D 37 38 84P-F004B 84P-U049 84P-F005A 37 84P-V014A 38 37 38 84P-F005B 84P-V014C 84P-F006A 37 84P-V014D 37 37 38 84P-F006B 84P-V050 84P-F007A 37 85P-F001A 37

85P-F001B

85P-F007

37

Change 4

Reference Designation to Figure Number Index (Continued)

Reference Designation	Figur No.
57 85P-K040A	37
57 85P-K040B	37
85P-N002A	37
85P-N002B	37
85P-N002C	37
85P-N002D	37
9P-P005	38

85P-N002D	37
9P-P005	38
LEGEND	
161702 AND UP.	
2 161353 THRU 161528.	
3 161353 THRU 161357.	
4 161359 AND UP.	
5 161520 AND UP.	
6 161354 THRU 161987 BEFO	ORE F18
AFC 48.	
7 161353 THRU 161519.	
8 F/A-18A 161702 AND UP.	
9 F/A-18B 161704 AND UP.	
10 F/A-18A.	
11 F/A-18B.	
12 161353 THRU 161924.	
13 161925 AND UP.	
161520 AND UP; ALSO 161	353 THRU
161519 AFTER F18 AFC 49	
15 F/A-18A 61702 AND UP, F/A	A-18B; ALSO
F/A-18A 161353 THRU 161:	528 AFTER F18
AFC 54.	
16 F/A-18A 161353 THRU 1629	909.
17 F/A-18A 163092 AND UP.	
<u>18</u> 163119 AND UP.	
19 161353 THRU 161519 BEFO	ORE F18
AFC 49.	
20 161737 AND UP.	
21 162826 AND UP.	
22 F/A-18A 161520 AND UP,	
F/A-18B 161704 THRU 1619	947, AND
162836 AND UP.	
23 161520 AND UP; ALSO	
F/A-18B 161354 THRU 1613	360 AFTER
F18 AFC 27.	
24 F/A-18B 163104 AND UP.	
25 161702 AND UP; ALSO 161	353 161528
AFTED E19 AEC 40	

AFTER F18 AFC 49.

Reference Designation to Figure Number Index (Continued)

Reference Designation	Figure No.
26 F/A-18A, F/A-18B 161354 THRU 161947, 16. AND UP.	2836
F/A-18A 161520 AND UP, F/A-18B 161170 THRU 161947, AN 162836 AND UP.	ND
28 162445 AND UP. 29 161353 THRU 161359. 30 161353 THRU 161715.	
31 161353 THRU 161521. 32 161353 THRU 161528 BEFORE F1 AFC 49.	8
33 161353 THRU 161528 BEFORE F1 AFC 41.	8
34 F/A-18A 161702 AND UP; ALSO 1 THRU 161528 AFTER F18 AFC 54	
35 161520 AND UP; ALSO 161353 THRU 161519 AFTER F18 AFC 27	
36 161353 THRU 161528 AFTER F18 49 AND 161702 THRU 161987 BEI F18 AFC 48.	AFC
37 161360 AND UP; ALSO 161353 TF 161359 AFTER F18 AFC 53.	HRU
162394 AND UP; ALSO 161353 TH 161528 AFTER F18 AFC 49, AND THRU 161987 AFTER F18 AFC 48	161702
39 161353 THRU 161519 BEFORE F1 AFC 27.	
40 F/A-18A 161353 THRU 161519 AF F18 AFC 39.	TER
F/A-18A 161520 AND UP, F/A-18B.	
42 F/A-18A 161353 THRU 161519. 43 162394 AND UP; ALSO 161702 TF 161987 AFTER F18 AFC 48.	łRU
44 161925 AND UP; ALSO 161248 TH 161924 AFTER F18 AFC 57.	HRU
45 F/A-18A 161353 THRU 161519; AI F/A-18B 161354 THRU 161360 BE F18 AFC 27.	
46 161361 AND UP; ALSO 161353 TH 161360 AFTER F18 AFC 27.	łRU
47 161982 AND UP. 48 161520 THRU 161981.	

Change 4

Reference Designation to Figure Number Index (Continued)

Reference Designation	Figure No.
49 162394 AND UP; ALSO 161353	ΓHRU
161987 AFTER F18 AFC 48.	
50 1 (1500 AND LID	

50 161522 AND UP. 51 161720 AND UP.

52 161353 THRU 161360 BEFORE F18 AFC 27.

53 161353 THRU 161519 BEFORE F18 AFC 27.

54 F/A-18A 162394 THRU 163175 AFTER F/A-18 AFC 253 OR AFC 292.

55 161925 AND UP AFTER F/A-18 AFC 231.

56 F/A-18A 162394 THRU 163175 AFTER F/A-18 AFC 292.

57 F/A-18A 162394 THRU 163175 AFTER F/A-18 AFC 253 OR AFC 292; ALSO 161925 AND UP AFTER F/A-18 AFC 225.

1. DESCRIPTION.

- 2. This work package describes procedures for installing protective boots on environmental type connectors with S3957XXX-34 molded plastic cable clamps for electromagnetic interference EMI and non-EMI applications
- 3. The J1317 EMI adapter is a two piece adapter used to install EMI backshells on rectangular connectors.

Support Equipment Required

Part Number or Type Designation	Nomenclature
3308AS100	Repair Set - Wire And Connector

Materials Required

Specification or Part Number	Nomenclature
See Table 1	Teflon Barrier Tape
See Table 2	Reinforced Silicone
	Rubber Tape
See Table 3	Mini Band
See Table 4	Wire Mesh Tape
See Table 5	Tedlar Tape
See Table 6	Expandable Sleeving
See Table 7	Silicone Rubber Tape
SN60WRMAP2-0-040	Solder
MIL-T-43435, TYPE 2,	Tape Lacing
SIZE 3, FINISH-C	

4. GENERAL TOOLING PROCEDURES.

5. CM ADAPTER TOOLS.

a. CM adapter tool is shown in figure 1. Select tool part number to shell size from tool data in reference designation to backshell data index for specific cable clamp.



White dot on adapter tool must be in line with master key of connector before insertion. Spinning the adapter tool on connector until it slips into place causes unnecessary wear to tools, keys and keyways.

b. Mate adapter tool to connector. See figure 2.

nge 4 Page 12

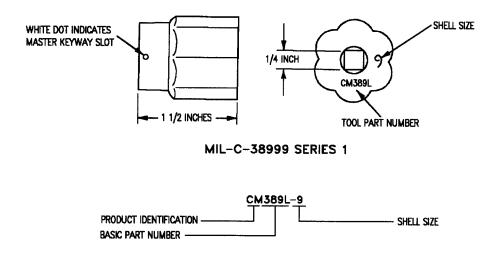


Figure 1. CM Adapter Tool Part Numbering System

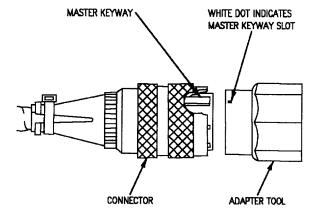


Figure 2. Adapter Tool Mating

6. STRAP WRENCH. **NOTE**

a. Install the strap around part to be tightened or loosened. Draw the strap tight and through the locking link so the cable clamp and strap rest on nose of wrench. See figure 3.

T-Handle can be used for more gripping force to adapter if required.

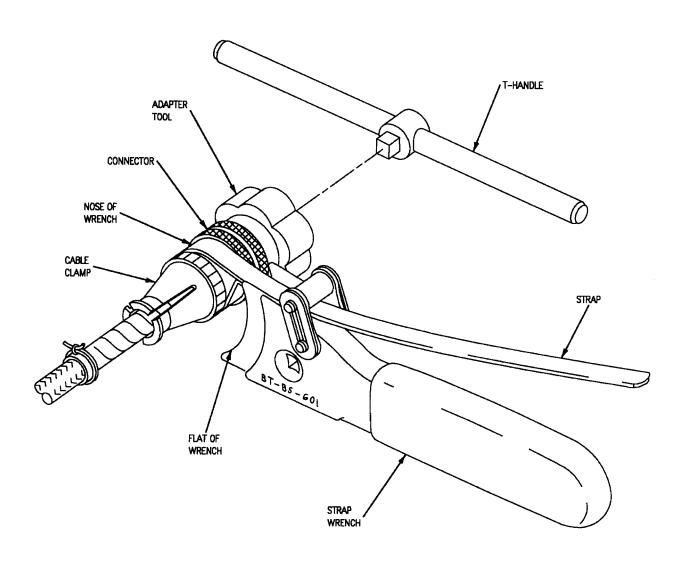


Figure 3. Strap Wrench Setup and Adjustment

- Change 4
- b. To tighten clamp, apply force in a clockwise direction as viewed from the rear of the connector. The clamp and strap are tucked under the nose of the wrench and against the flat of the wrench. See figure 4.
- c. To loosen clamp, turn counterclockwise as viewed from the rear of the connector. See figure 5.
- 7. BOOT INSTALLATION WITH ELECTRO-MAGNETIC INTERFERENCE (EMI) AP-PLICATION.
- 8. DISASSEMBLY PROCEDURE.

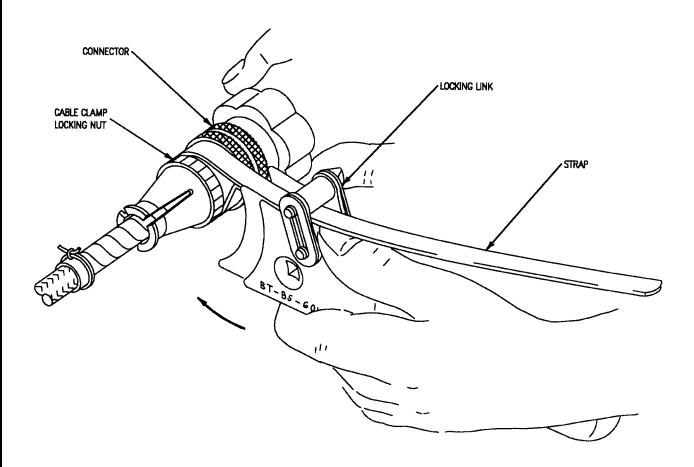


Figure 4. Tightening Position of Wrench

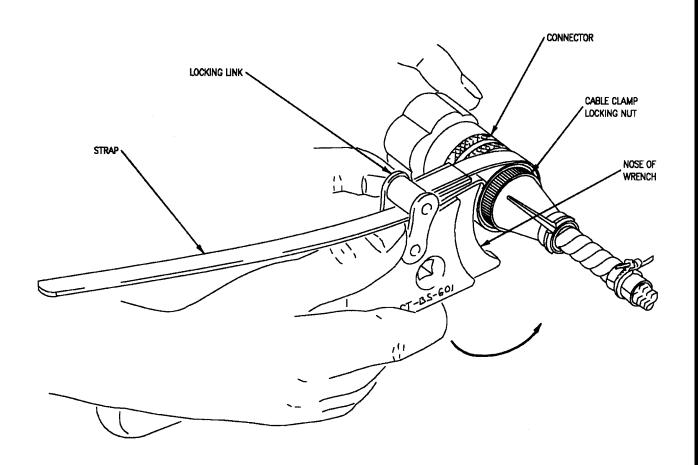


Figure 5. Loosening Position of Wrench

9. To disassemble plastic cable clamp from connector, do substeps below:



When cutting boot material with a sharp tool, be careful not to nick or scrape the wire insulation under the cut.

- a. Remove spot ties along with connector band marker and teflon barrier tape from expandable sleeve. See figure 6. Save connector band marker for reassembly of boot area.
- b. Grasp the free end of expandable sleeving and push to telescope the sleeving back over itself. See figure 7.

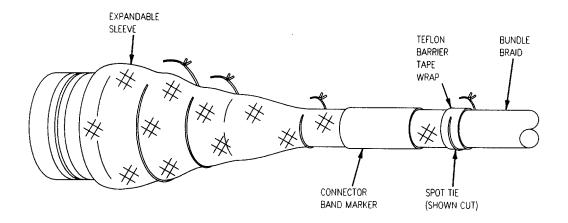


Figure 6. Spot Tie Removal

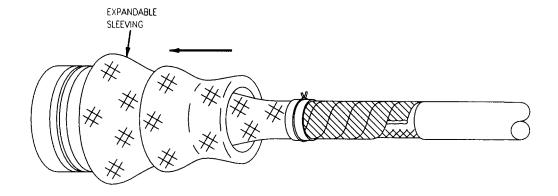


Figure 7. Position Expandable Sleeving for Removal

Page 17

c. Remove spot ties and teflon barrier tape from expandable sleeve. Slide expandable sleeve off connector. See figure 8.

CAUTION

Do not cut off the buckle to loosen mini band.

- d. Remove the three to four wraps of teflon barrier tape from mini band. Remove mini band by straightening the rolled over tab using pliers or diagonal cutters. Slide tab through the buckle. See figure 9.
- e. Remove spot tie along with teflon barrier tape and tedlar tape from the wire mesh tape wrap. See figure 10.

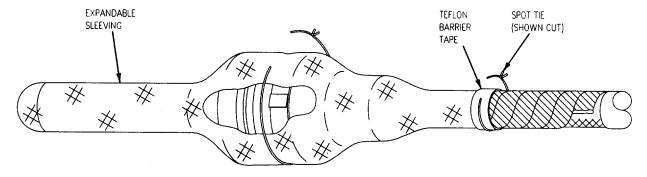


Figure 8. Expandable Sleeving Removal

090008

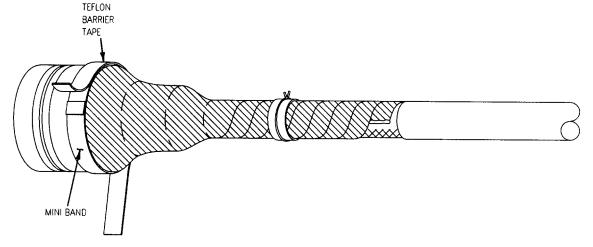


Figure 9. Mini Band Removal From Wire Mesh Tape

090009

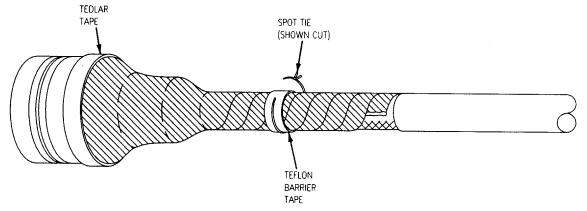


Figure 10. Spot Tie and Tape Removal From Wire Mesh Tape

f. Unwrap wire mesh tape and remove the three to four wraps of teflon barrier tape from mini band. See figure 11.

CAUTION

Do not cut off the buckle to loosen mini band.

g. Remove mini band by straightening the rolled over tab using pliers or diagonal cutters. Slide tab through the buckle. See figure 12.

- h. Remove cable clamp and cable clamp locking nut from connector. If required, use strap wrench and CM adapter tool to loosen cable clamp locking nut. See figure 5.
- i. Slide cable clamp locking nut and cable clamp onto cable assembly. See figure 13.
- j. Cut or unwrap reinforced silicone rubber tape buildup and teflon barrier tape covering boot area. See figure 13.

10. REASSEMBLY PROCEDURES.

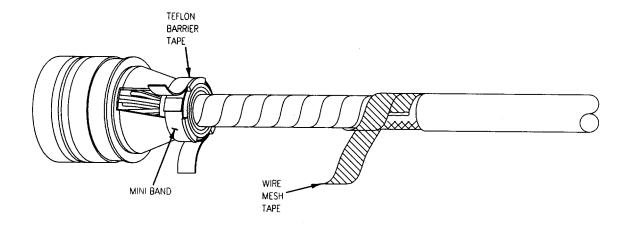


Figure 11. Wire Mesh Tape Removal

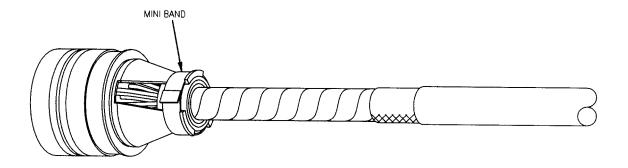


Figure 12. Mini Band Removal from Cable Clamp

a. Slide cable clamp locking nut and cable clamp onto cable assembly and install connector. See figure 14.

b. Tighten cable clamp locking nut. See figure 15. If required, use strap wrench and CM adapter tool. See figure 4.

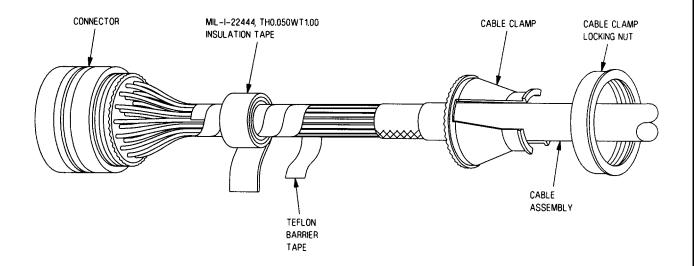


Figure 13. Teflon Barrier Tape Removal

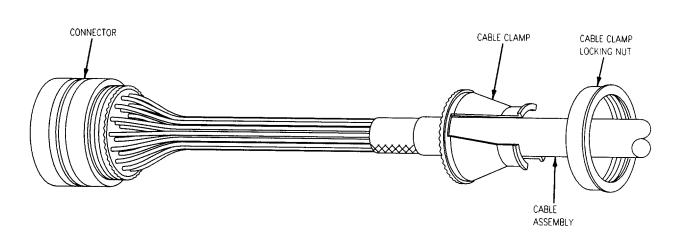


Figure 14. Installing EMI Cable Clamp Locking Nut and EMI Cable Clamp on Cable Assembly

090014

Change 4

- c. Position teflon barrier tape immediately in back of cable clamp. Spiral wrap teflon barrier tape using a 50% overlap over exposed wires up to the cable shield. See figure 16.
- d. Apply a buildup of reinforced silicone rubber tape around spiral wrapped teflon barrier tape. See figure 17.

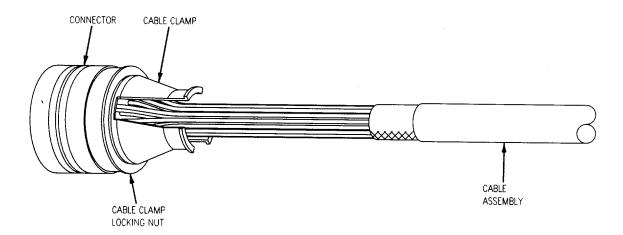


Figure 15. Installing EMI Cable Clamp and EMI Cable Clamp Locking Nut

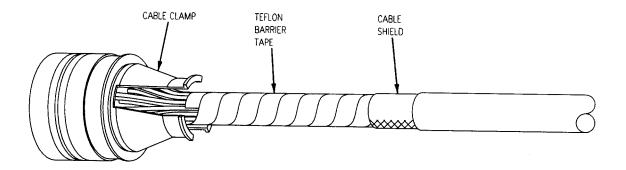


Figure 16. Teflon Barrier Tape Installation

090016

090015

Table 1. Teflon Barrier Tape

PART NUMBER	CAGE	WIDTH (INCH)
62	20999	1/2

TAPE COMES IN ROLLS COLOR - WHITE OR BROWN

TEMPERATURE RANGE: -130° TO +500°F

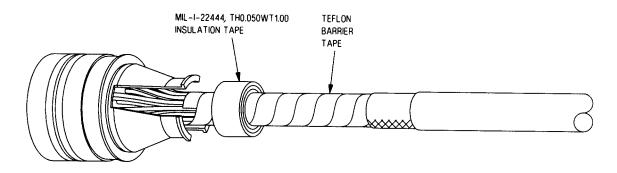


Figure 17. Reinforced Silicone Rubber Tape Installation on EMI Cable Clamp

Table 2. Reinforced Silicone Rubber Tape

PART NUMBER	CAGE	WIDTH (INCH)
S-5025	07099	1/2
S-80	07099	1/2

REINFORCED WITH FIBERGLASS

SELF - BONDING

TAPE COMES IN ROLLS

COLOR - BLACK

TEMPERATURE RANGE: -178° TO +500°F

- e. Apply forward pressure to reinforced silicone rubber tape wrap until buildup is under cable clamp fingers. See figure 18.
- f. Secure S3175-4 mini band on cable clamp fingers using DBS-1200 termination tool. See figure 19.
- g. Wrap three to four turns of teflon barrier tape around mini band to cover any sharp edges. See figure 20.
- h. If required, solder wire mesh tape to cable shield. See figure 21.
- i. Wrap wire mesh tape with a 50% overlap onto cable clamp locking nut and then cross wrap in the

opposite direction about one to two inches back over the cable clamp fingers. Secure end of wire mesh tape with teflon barrier tape and string tie. See figure 22.

- j. Wrap 4 turns of tedlar tape over wire mesh tape that covers the cable clamp locking nut. See figure 22.
- k. Secure wire mesh tape to cable clamp locking nut with S3175-4 mini band, using DBS-1200 termination tool. See figure 23.
- 1. Wrap 3 to 4 turns of teflon barrier tape over mini band to cover any sharp edges.

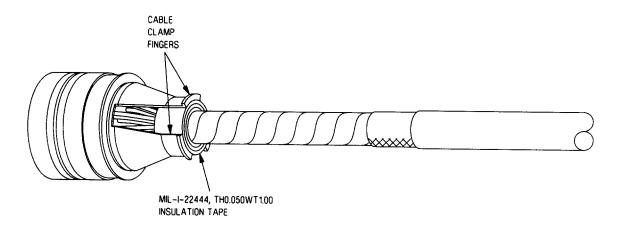


Figure 18. Positioning Reinforced Silicone Rubber Tape Wrap

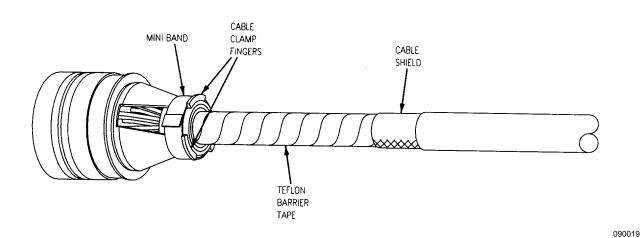


Figure 19. Mini Band Installation To EMI Cable Clamp

Table 3. Mini Band

PART NUMBER	CAGE	WIDTH (INCH)		
S3175-4	07418	3/16		
TEMPERATURE RANGE: -55° TO +150°C				

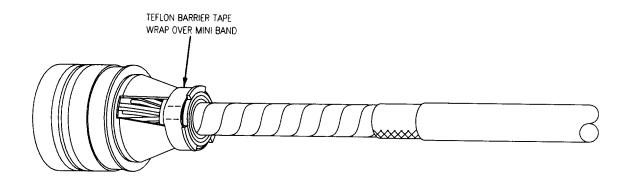


Figure 20. Protective Tape Wrap Over Mini Band

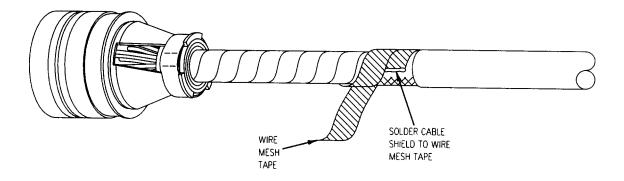


Figure 21. Wire Mesh Tape Installation to Bundle Shield

090021

Table 4. Wire Mesh Tape

PART NUMBER	CAGE	WIDTH (INCH) NOMINAL	THICKNESS (INCH) NOMINAL	WIRE DIAMETER (INCH)
SC 61298	0BKF2	1.000	1/64	17/128 (35 GAGE)

TAPE COMES IN ROLLS OUTSIDE DIAMETER 3 INCHES

TEMPERATURE RANGE: -65° TO +300°F

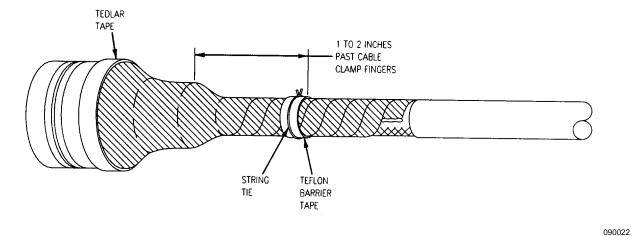


Figure 22. Wire Mesh Tape Wrapping

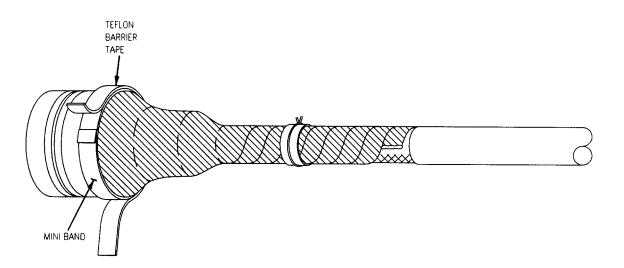


Figure 23. Mini Band Installation Over Wire Mesh Tape

Table 5. Tedlar Tape

PART NUMBER	CAGE	WIDTH (INCH)
B637	85480	1/4

SELF - BONDING TAPE COMES IN ROLLS COLOR - BROWN

TEMPERATURE RANGE: -149° TO +275°F

Change 4

NOTE

Use the smallest diameter expandable sleeving for the application. See table 6.

- m. Slide about 14 inches of expandable sleeving onto and over connector. See figure 24.
- n. Locate the gap between the mini band and connector under expandable sleeving. Securely tie the expandable sleeving with size 2 lacing tape at the gap. Verify the coupling ring of connector will rotate freely after tying. See figure 24.
- o. Secure other end of expandable sleeving with teflon barrier wrap and size 2 lacing tape. See figure 24.

- p. Grasp the free end of expandable sleeving and push to telescope the sleeving back over itself and on cable assembly. See figure 25.
- q. Terminate the expandable sleeving so it overlaps onto the cable braid about one inch. See figure 26.
- r. Wrap teflon barrier tape around expandable sleeving end, secure in place with size 2 lacing tape. See figure 26.
- s. Place connector band marker over expandable sleeving and secure in place with clear teflon tape.

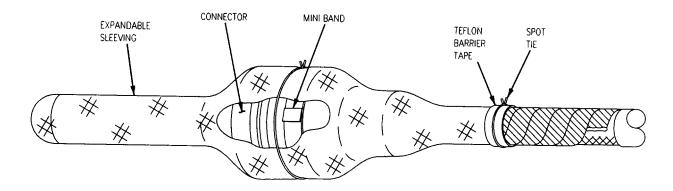


Figure 24. Starting Expandable Sleeving

Table 6. Expandable Sleeving

CAGE 81851				
NOMINAL ID (INCHES)	PART NO.	EXPANDABLE RANGE		
1/2	6253001	1/4 - 3/4		
3/4	6255001	1/2 - 1 1/4		
1 1/4	6262001	3/4 - 1 3/4		
1 1/2	6264921	7/8 - 2 1/2		
1 3/4	6266001	1 1/4 - 2 3/4		
2	6270001	1 1/2 - 3 1/2		

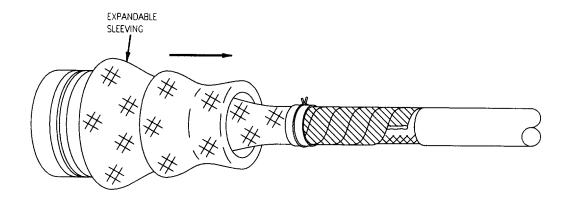


Figure 25. Folding Expandable Sleeving Onto Cable Assembly

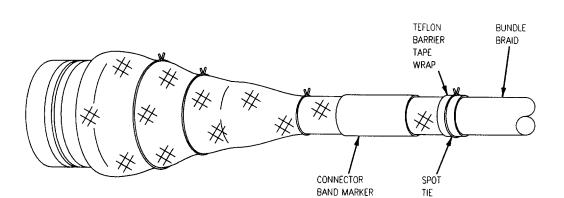


Figure 26. Securing Expandable Sleeving to Cable Assembly

11. BOOT INSTALLATION WITH NON (EMI) APPLICATION.

12. DISASSEMBLY PROCEDURE.

- 13. To disassemble mini band from connector, do substeps below:
 - a. Cut and remove spot tie. See figure 27.
- b. Remove teflon barrier tape wrap from mini band. See figure 27.



Do not cut off the buckle to loosen mini band.

c. Remove mini band by straightening the rolled over tab using pliers or diagonal cutters. Slide tab through the buckle. See figure 27.

d. Remove cable clamp and cable clamp locking nut from connector. See figure 28. If required, use strap wrench and CM adapter tool to loosen cable clamp locking nut. See figure 5.

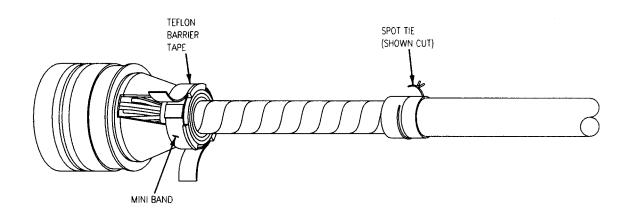


Use of sharp tool to cut silicone rubber tape boot from cable assembly can cause wire insulation damage below cut. Be careful not to damage wiring insulation.

e. Cut or unwrap reinforced silicone rubber tape buildup and silicone rubber tape covering boot area. See figure 28.

14. REASSEMBLY PROCEDURE.

a. Slide cable clamp locking nut and cable clamp on cable assembly and install connector. See figure 29.



090027

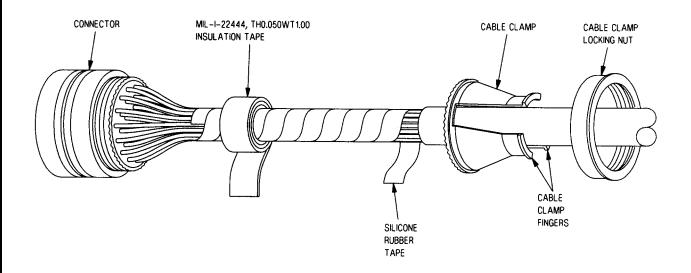


Figure 28. Tape Removal of Boot Area

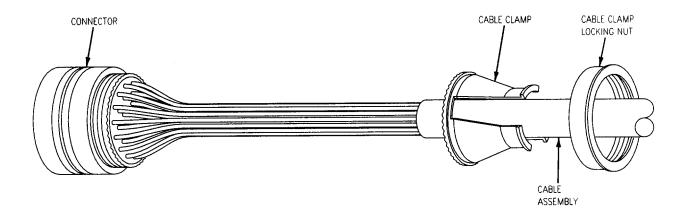


Figure 29. Installing Cable Clamp Locking Nut and Cable Clamp on Cable Assembly

Change 4

- b. Slide cable clamp and cable clamp locking nut on rear of connector and tighten. See figure 30. If required, use strap wrench and CM adapter tool. See figure 4.
- c. Cut silicone rubber tape into a triangular section. See figure 31.

NOTE

For best results when applying silicone rubber tape, hands should be free of dirt and oil.

- d. Position trimmed part of silicone rubber tape immediately in back of and parallel to back of cable clamp.
- e. Spiral wrap silicone rubber tape two or three turns around exposed wires using 50% overlap. See figure 32.
- f. Apply a buildup of reinforced silicone rubber tape (see table 2) around spiral wrapped silicone rubber tape. See figure 33.

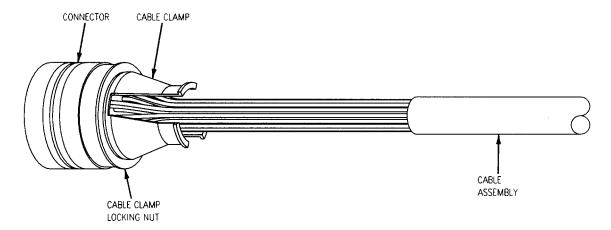


Figure 30. Installing Cable Clamp and Cable Clamp Locking Nut

090030

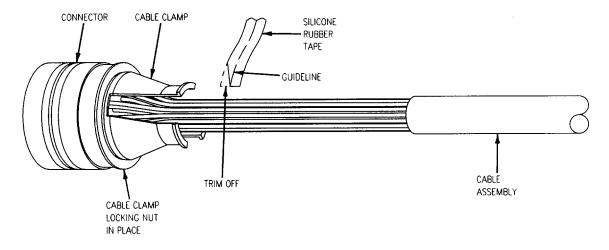


Figure 31. Preparing Silicone Rubber Tape

Change 4

Table 7. Silicone Rubber Tape

PART NUMBER	CAGE	WIDTH (INCH)
604-1	07099	1
SELF - BONDING TAPE COMES IN ROLLS		

TEMPERATURE RANGE: -178° TO +500°F

COLOR - BLACK

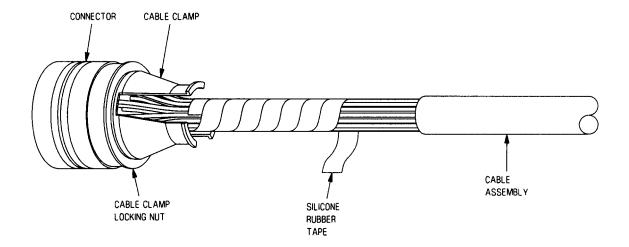


Figure 32. Silicone Rubber Tape Installation

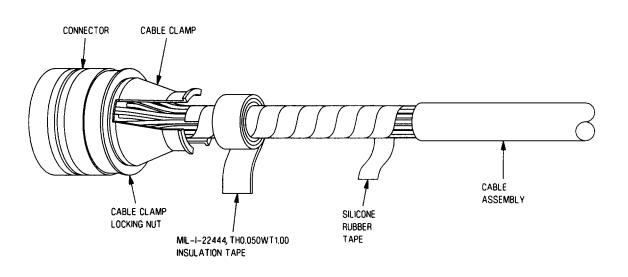


Figure 33. Reinforced Silicone Rubber Tape Installation

090033

CAUTION

To prevent damage to wire terminations, make sure wires are not abnormally stressed.

- g. Apply forward pressure to tape buildup and spiral wrap until buildup is under cable clamp fingers. See figure 34.
- h. Install S3175-4 mini band (see table 3) on cable clamp using DBS-1200 termination tool. See figure 35.

NOTE

Tape wrapping must follow cable assembly contour with no unnecessary buildup. Follow tape guideline and keep tape firmly stretched.

- i. Spiral wrap, using same continuous length of silicone rubber tape, over exposed wire on braided cable jacket using 50% overlap.
- j. Overlap silicone rubber tape on braided cable jacket a minimum of 1/2-inch to prevent wiring exposure during cable assembly flexing.

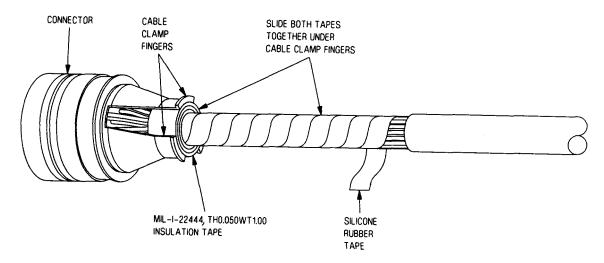


Figure 34. Positioning Tape Buildup and Spiral Wrap

090034

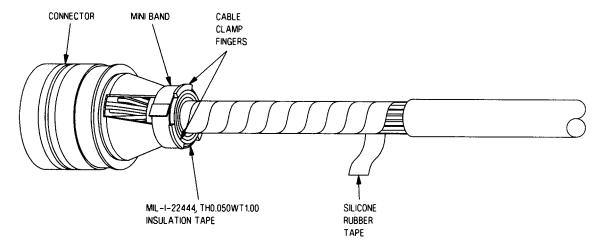


Figure 35. Mini Band Installation to Cable Clamp

NOTE

Do not keep tape stretched while doing next step.

k. Terminate silicone rubber tape by wrapping one full turn around cable assembly. See figure 36.

- 1. Cut silicone rubber tape and spot tie with lacing tape. See figure 36.
- m. Wrap three to four turns of teflon barrier tape (see table 1) around mini band to cover any sharp edges. See figure 36.

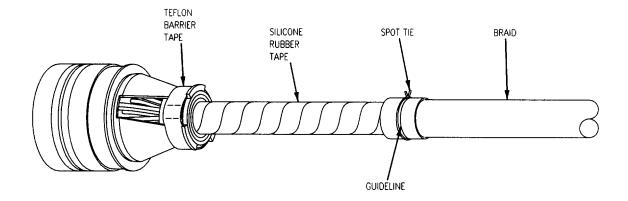
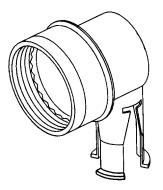


Figure 36. Tape Wrapping of Boot Area



Reference Designation to Backshell Data Index

Reference Designation to Backsnell Data Index				
REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER	
28 1J-A153	S3957R16-34	172 00	None	
43 1P-A138	S3957R20-34	169 00	CM389L-21	
28 1P-A153	S3957R16-34	169 00	CM389L-17	
1P-C007	S3957R12-34	169 00	CM389L-13	
1P-C022	S3957R12-34	169 00	CM389L-13	
1P-C023	S3957R16-34	171 00	CM389S-16	
42 1P-C072	S3957R16-34	169 00	CM389L-17	
44 1P-C072A	S3957R16-34	169 00	CM389L-17	
8 1P-C072B	S3957R16-34	169 00	CM389L-17	
36 1P-C145	S3957R12-34	169 00	CM389L-13	
1P-D006	S3957R8-34	169 00	CM389L-9	
1P-D008	S3957R12-34	169 00	CM389L-13	
1P-D024	S3957R16-34	171 00	CM389S-16	
43 1P-D035	S3957R16-34	169 00	CM389L-17	
44 1P-D035A	S3957R16-34	169 00	CM389L-17	
8 1P-D035B	S3957R16-34	169 00	CM389L-17	
36 1P-D146	S3957R12-34	169 00	CM389L-13	
9 1P-D155	S3957R11-34	168 00	CM389L-11	
1P-H004	S3957R14-34	169 00	CM389L-15	
17 1P-J137	S3957R8-34	169 00	CM389L-9	
10P-J005	S3957R12-34	169 00	CM389L-13	
2 10P-L018	S3957R12-34	169 00	CM389L-13	
10P-P006A	S3957R10-34	169 00	CM389L-11	
10P-P006B	S3957R10-34	169 00	CM389L-11	
10P-P008	S3957R10-34	169 00	CM389L-11	
10P-R007A	S3957R10-34	169 00	CM389L-11	
10P-R007B	S3957R10-34	169 00	CM389L-11	
10P-R011	S3957R10-34	169 00	CM389L-11	
10P-R012	S3957R8-34	169 00	CM389L-9	
36 12P-A004A	S3957R24-34	169 00	CM389L-25	
45 12P-D004A	S3957R24-34	169 00	CM389L-25	

Figure 37. S3957RXX-34 Backshells (Sheet 1)

Reference Designation to Backshell Data Index (Continued)

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
12P-H008	S3957R14-34	169 00	CM389L-15
11 12S-G057	S3957R18-34	None	None
13P-D003	S3957R16-34	169 00	CM389L-17
13P-P004	S3957R8-34	169 00	CM389L-9
17J-J008	S3957R10-34	172 00	CM389L-11
17J-U017	S3957R10-34	172 00	CM389L-11
17J-V018	S3957R10-34	172 00	CM389L-11
19P-J003	S3957R12-34	169 00	CM389L-13
30 2P-M010A	S3957R14-34	169 00	CM389L-15
41 2P-M010B	S3957R14-34	169 00	CM389L-15
13 2P-N010A	S3957R14-34	169 00	CM389L-15
13 2P-N010B	S3957R14-34	169 00	CM389L-15
20J-J 003	S3957R10-34	172 00	CM389L-11
22J-C108	S3957R16-34	172 00	CM389L-17
14 22J-E098	S3957R8-34	172 00	CM389L-9
29 22J-K171	S3957R14-34	172 00	CM389L-41
22J-M099	S3957R14-34	172 00	CM389L-15
22P-A088	S3957R8-34	169 00	CM389L-9
22P-A090	S3957R12-34	169 00	CM389L-13
22P-D002A	S3957R16-34	169 00	CM389L-17
22P-D002B	S3957R16-34	169 00	CM389L-17
22P-E004	S3957R10-34	169 00	CM389L-11
10 22P-E098	S3957R8-34	169 00	CM389L-9
22P-H069	S3957R10-34	169 00	CM389L-11
22P-J026	S3957R10-34	169 00	CM389L-11
22P-J068	S3957R10-34	169 00	CM389L-11
22P-K102	S3957R8-34	169 00	CM389L-9
2 22P-K114	S3957R10-34	169 00	CM389L-11
15 22P-K170	S3957R12-34	169 00	CM389L-13
15 22P-K171	S3957R10-34	169 00	CM389L-11
2 22P-L102	S3957R8-34	169 00	CM389L-9
2 22P-L113	S3957R10-34	169 00	CM389L-11
30 22P-L170	S3957R12-34	169 00	CM389L-13
22P-M084	S3957R10-34	169 00	CM389L-11
22P-M086	S3957R14-34	169 00	CM389L-15
16 22P-N014	S3957R8-34	169 00	CM389L-9
16 22P-N017	S3957R8-34	169 00	CM389L-9
22P-P005	S3957R8-34	169 00	CM389L-9
22P-R006	S3957R8-34	169 00	CM389L-9
16 22P-R015A	S3957R8-34	169 00	CM389L-9
16 22P-R015B	S3957R8-34	169 00	CM389L-9
16 22P-R016	S3957R8-34	169 00	CM389L-9
22P-S018	S3957R8-34	169 00	CM389L-9
22P-S019	S3957R8-34	169 00	CM389L-9
23P-B002	S3957R10-34	169 00	CM389L-11
28P-A017	S3957R10-34	169 00	CM389L-11

Figure 37. S3957RXX-34 Backshells (Sheet 2)

Change 4

Reference Designation to Backshell Data Index (Continued)

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
28P-B015	S3957R12-34	169 00	CM389L-13
28P-B016	S3957R12-34	169 00	CM389L-13
28P-B018	S3957R10-34	169 00	CM389L-11
3P-E079	S3957R10-34	169 00	CM389L-11
3P-H001	S3957R18-34	169 00	CM389L-19
2 3P-K002	S3957R18-34	169 00	CM389L-19
30 33P-M008	S3957R10-34	169 00	CM389L-11
13 3P-N008	S3957R10-34	169 00	CM389L-11
33P-H011	S3957R12-34	169 00	CM389L-13
2 33P-L016	S3957R10-34	169 00	CM389L-11
27 5J-G024	S3957R16-34	172 00	CM389L-17
5J-P145	S3957R12-34	170 00	BT-J-137
16 5J-R144	S3957R12-34	170 00	BT-J-137
5P-B019	S3957R10-34	169 00	CM389L-11
5P-D009	S3957R8-34	169 00	CM389L-9
31 5P-E035	S3957R10-34	169 00	CM389L-11
2 5P-E053	S3957R12-34	169 00	CM389L-13
5P-F014A	S3957R16-34	169 00	CM389L-17
5P-F014B	S3957R16-34	169 00	CM389L-17
5P-F029	S3957R8-34	169 00	CM389L-9
12 5P-F035	S3957R10-34	169 00	CM389L-11
5P-F116	S3957R10-34	169 00	CM389L-11
5P-H013	S3957R16-34	169 00	CM389L-17
2 5P-K015	S3957R12-34	169 00	CM389L-13
19 5P-M036	S3957R10-34	169 00	CM389L-11
19 5P-N040	S3957R10-34	169 00	CM389L-11
5P-P102	S3957R8-34	169 00	CM389L-9
5P-P136	S3957R10-34	169 00	CM389L-11
5P-P137	S3957R10-34	169 00	CM389L-11
5P-R030	S3957R10-34	169 00	CM389L-11
5P-R031	S3957R10-34	169 00	CM389L-11
5P-R032	S3957R8-34	169 00	CM389L-9
5P-R033	S3957R8-34	169 00	CM389L-9
5P-R034	S3957R8-34	169 00	CM389L-9
5P-R120	S3957R10-34	169 00	CM389L-11
5P-T104	S3957R8-34	169 00	CM389L-9
5P-T106	S3957R10-34	169 00	CM389L-11
52J-B021	S3957R12-34	172 00	CM389L-13
52J-C022	S3957R18-34	172 00	CM389L-19
52J-C051	S3957R20-34	172 00	CM389L-21
2 52J-E154	S3957R10-34	172 00	CM389L-11
52J-F001	S3957R22-34	170 00	BT-J-150
16 52J-F003	S3957R22-34	170 00	BT-J-150
16 52J-F006	S3957R22-34	170 00	BT-J-150
2 52J-H033	S3957R14-34	172 00	CM389L-23

Figure 37. S3957RXX-34 Backshells (Sheet 3)

Reference Designation to Backshell Data Index (Continued)

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
1 52J-H033	S3957R24-34	172 00	CM389L-25
52J-H039	S3957R24-34	172 00	CM389L-25
52J-H046	S3957R24-34	172 00	CM389L-25
10 52J-H048	S3957R14-34	172 00	CM389L-15
52J-H049	S3957R12-34	172 00	CM389L-13
52J-H073	S3957R16-34	172 00	CM389L-17
52J-H083	S3957R8-34	172 00	CM389L-9
52J-H085	S3957R12-34	170 00	None
25 52J-H088	S3957R10-34	172 00	CM389L-11
52J-J008	S3957R14-34	172 00	CM389L-15
52J-J038	S3957R24-34	172 00	CM389L-25
52J-J074	S3957R16-34	172 00	CM389L-17
52J-J086	S3957R12-34	172 00	CM389L-13
2 52J-K301	S3957R12-34	172 00	CM389L-13
2 52J-K302	S3957R14-34	172 00	CM389L-15
2 52J-K307	S3957R24-34	172 00	CM389L-25
52J-L030	S3957R20-34	172 00	CM389L-21
20 52J-L160	S3957R16-34	172 00	CM389L-17
2 52J-L308	S3957R20-34	172 00	CM389L-21
21 52J-R163	S3957R18-34	172 00	None
21 52J-R164	S3957R24-34	172 00	None
21 52J-R165	S3957R22-34	172 00	None
52P-C057A	S3957R20-34	169 00	CM389L-21
52P-C057B	S3957R16-34	169 00	CM389L-17
52P-C057C	S3957R24-34	169 00	CM389L-25
52P-C057D	S3957R24-34	169 00	CM389L-25
52P-C057E	S3957R24-34	169 00	CM389L-25
52P-C057F	S3957R24-34	169 00	CM389L-25
7 52P-C057G	S3957R22-34	169 00	CM389L-23
52P-C085	S3957R12-34	169 00	CM389L-13
52P-C159A	S3957R20-34	169 00	CM389L-21
52P-C159B	S3957R20-34	169 00	CM389L-21
52P-C159C	S3957R16-34	169 00	CM389L-17
52P-C159D	S3957R16-34	169 00	CM389L-17
52P-C159E	S3957R24-34	169 00	CM389L-25
52P-C159G	S3957R22-34	169 00	CM389L-23
36 52P-C161	S3957R14-34	169 00	CM389L-15
52P-D008	S3957R14-34	169 00	CM389L-15
52P-D024A	S3957R20-34	169 00	CM389L-21
4 52P-D024B	S3957R16-34	169 00	CM389L-17
3 52P-D024B	S3957R20-34	169 00	CM389L-21
52P-D024C	S3957R24-34	169 00	CM389L-25
3 52P-D024D	S3957R16-34	169 00	CM389L-17
52P-D024D	S3957R20-34	169 00	CM389L-21
3 52P-D024E	S3957R16-34	169 00	CM389L-17
52P-D038	S3957R24-34	169 00	CM389L-25

Figure 37. S3957RXX-34 Backshells (Sheet 4)

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
52P-D086	S3957R12-34	169 00	CM389L-13
52P-D092A	S3957R16-34	169 00	CM389L-17
52P-D092B	S3957R18-34	169 00	CM389L-19
52P-D092C	S3957R14-34	169 00	CM389L-15
52P-E059	S3957R24-34	169 00	CM389L-25
2 52P-E307	S3957R24-34	169 00	CM389L-25
16 52P-F001	S3957R22-34	169 00	CM389L-23
52P-F003	S3957R22-34	169 00	CM389L-23
52P-F006	S3957R22-34	169 00	CM389L-23
52P-F030	S3957R20-34	169 00	CM389L-19
52P-F058A	S3957R24-34	169 00	CM389L-25
52P-F058B	S3957R24-34	169 00	CM389L-25
52P-F058C	S3957R24-34	169 00	CM389L-25
52P-F058D	S3957R24-34	169 00	CM389L-25
52P-F058E	S3957R24-34	169 00	CM389L-25
20 52P-F160	S3957R16-34	169 00	CM389L-17
52P-H077A	S3957R14-34	169 00	CM389L-15
52P-H077B	S3957R12-34	169 00	CM389L-13
52P-H081	S3957R12-34	169 00	CM389L-13
52P-H087	S3957R16-34	169 00	CM389L-17
14 52P-H088	S3957R10-34	169 00	CM389L-11
52P-H089	S3957R10-34	169 00	CM389L-11
52P-H091	S3957R14-34	169 00	CM389L-15
1 52P-H098	S3957R10-34	169 00	CM389L-11
52P-J053	S3957R10-34	169 00	CM389L-11
2 52P-K304	S3957R8-34	169 00	CM389L-9
2 52P-K305	S3957R12-34	169 00	CM389L-13
52P-M069	S3957R14-34	169 00	CM389L-15
52P-M071	S3957R12-34	169 00	CM389L-13
52P-N070	S3957R14-34	169 00	CM389L-15
52P-N072	S3957R12-34	169 00	CM389L-13
52P-N118A	S3957R18-34	169 00	CM389L-19
52P-N118B	S3957R18-34	169 00	CM389L-19
52P-P163	S3957R18-34	169 00	CM389L-19
21 52P-P164	S3957R24-34	169 00	CM389L-25
16 52P-R065	S3957R22-34	169 00	CM389L-23
34 52P-R166	S3957R12-34	169 00	CM389L-13
46 52P-U045C	S3957R24-34	169 00	CM389L-25
46 52P-U045D	S3957R16-34	169 00	CM389L-17
46 52P-V044C	S3957R24-34	169 00	CM389L-25
46 52P-V044D	S3957R16-34	169 00	CM389L-23
61J-P110A	S3957R20-34	172 00	CM389L-17 CM389L-21
61J-P110A		172 00	
16 61J-R111A	S3957R12-34		CM389L-13
	S3957R12-34	172 00	CM389L-13
16 61J-R111B	S3957R14-34	172 00	CM389L-15
61P-A020A	S3957R14-34	169 00	CM389L-15

Figure 37. S3957RXX-34 Backshells (Sheet 5)

Reference Designation to Backsnell Data Index (Continued)			
REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
61P-A020B	S3957R14-34	169 00	CM389L-15
61P-A246A	S3957R10-34	169 00	CM389L-11
61P-A246B	S3957R12-34	169 00	CM389L-13
61P-B164	S3957R8-34	169 00	CM389L-11
6 61P-B184	S3957R8-34	169 00	CM389L-9
61P-D033	S3957R14-34	169 00	CM389L-15
61P-F001A	S3957R24-34	169 00	CM389L-25
61P-F001B	S3957R24-34	169 00	CM389L-25
61P-F010A	S3957R10-34	169 00	CM389L-11
61P-F010B 61P-J022A	S3957R20-34	169 00	CM389L-19 CM389L-13
61P-J022B	S3957R12-34	169 00 169 00	
61P-J022B 61P-J022C	S3957R14-34 S3957R8-34	169 00	CM389L-15 CM389L-9
32 61P-J022C	S3957R10-34	169 00	
			CM389L-11
46 61P-P014A	S3957R22-34	169 00	CM389L-23
46 61P-P014B	S3957R12-34	169 00	CM389L-13
46 61P-P014C	S3957R10-34	169 00	CM389L-11
46 61P-P190	S3957R10-34	169 00	CM389L-11
46 61P-R016A	S3957R22-34	169 00	CM389L-23
46 61P-R016B	S3957R12-34	169 00	CM389L-13
46 61P-R016C	S3957R10-34	169 00	CM389L-11
16 61P-R167	S3957R16-34	169 00	CM389L-17
46 61P-R191	S3957R10-34	169 00	CM389L-11
14 62J-J007	S3957R14-34	172 00	CM389L-15
14 62P-E006A	S3957R20-34	169 00	CM389L-21
14 62P-E006B	S3957R20-34	169 00	CM389L-19
24 62P-E006C	S3957R10-34	169 00	CM389L-11
14 62P-E009K	S3957R10-34	169 00	CM389L-11
14 62P-E009L	S3957R14-34	169 00	CM389L-15
14 62P-J008	S3957R12-34	169 00	CM389L-13
38 62P-L027	S3957R12-34	169 00	CM389L-13
14 62P-S012A	S3957R12-34	169 00	CM389L-13
14 62P-T011A	S3957R12-34	169 00	CM389L-13
65J-P004	S3957R18-34	161 00	CM264-18
65J-R005	S3957R18-34	161 00	CM264-18
5 65P-P001A	S3957R18-34	161 00	CM264-18
22 65P-P001B	S3957R18-34	161 00	CM264-18
5 65P-R002A	S3957R18-34	161 00	CM264-18
22 65P-R002B	S3957R18-34	161 00	CM264-18
66P-F001A	S3957R22-34	169 00	CM389L-23
66P-F001B	S3957R10-34	169 00	CM389L-11
66P-F001C	S3957R16-34	169 00	CM389L-17
66P-F001D	S3957R18-34	169 00	CM389L-19
46 66P-F001E	S3957R17-34	168 00	CM389T-17A
46 66P-F001F	S3957R21-34	168 00	CM389T-21A

Figure 37. S3957RXX-34 Backshells (Sheet 6)

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
67P-J002	S3957R14-34	169 00	CM389L-15
68P-E001A	S3957R24-34	169 00	CM389L-25
68P-E001C	S3957R16-34	169 00	CM389L-17
47 68P-E011A	S3957R16-34	169 00	CM389L-25
46 69P-F016	S3957R13-34	168 00	CM389T-13B
2 7P-K032	S3957R14-34	169 00	CM389L-15
1 7P-L032	S3957R14-34	169 00	CM389L-15
70J-B004	S3957R14-34	172 00	CM389L-15
70P-F001A	S3957R14-34	169 00	CM389L-15
70P-F001B	S3957R24-34	169 00	CM389L-25
76P-F001B	10-552682-179	168 00	CM389T-17B
76P-F002B	10-552682-179	168 00	CM389T-17A
76P-F004A	S3957R12-34	169 00	CM389L-13
46 76P-F042E	S3957R17-34	168 00	CM389T-17B
46 76P-F042F	S3957R9-34	168 00	CM389T-9A
46 76P-F042G	S3957R15-34	168 00	CM389T-15A
46 76P-F042H	S3957R15-34	168 00	CM389T-15B
76P-H009A	S3957R24-34	169 00	CM389L-25
76P-H009B	S3957R24-34	169 00	CM389L-23
46 76P-H009D	S3957R20-34	169 00	CM389L-21
2 77P-K001B	10-552682-179	168 00	CM389L-17B
1 77P-L001B	10-552682-179	168 00	CM389L-17B
48 78P-A014	S3957R16-34	169 00	CM389L-17
78P-E001A	S3957R20-34	171 00	CM389S-20
2 78P-L005	S3957R10-34	169 00	CM389L-11
2 8J-L098	S3957R14-34	172 00	None
8P-H052	S3957R8-34	169 00	CM389L-9
2 8P-L097A	S3957R16-34	169 00	CM389L-17
2 8P-L097B	S3957R24-34	169 00	CM389L-25
2 8P-L098	S3957R14-34	169 00	CM389L-15
2 8P-L127	S3957R16-34	169 00	CM389L-17
82P-F001A	S3957R24-34	169 00	CM389L-25
82P-F001C	S3957R24-34	169 00	CM389L-25
46 83J-L018	S3957R12-34	172 00	None
83P-E001A	S3957R24-34	169 00	CM389L-25
83P-E001B	S3957R10-34	169 00	CM389L-11
83P-E001C	S3957R24-34	169 00	CM389L-25
83P-E001D	S3957R14-34	169 00	CM389L-15
83P-E001E	S3957R14-34	169 00	CM389L-15
47 83P-E001H	S3957R13-34	168 00	CM389B-13
47 83P-E001K	S3957R25-34	168 00	CM389B-25
47 83P-E001L	S3957R13-34	168 00	CM389B-13
6 83P-E005	S3957R12-34	169 00	CM389L-13

Figure 37. S3957RXX-34 Backshells (Sheet 7)

	Reference Designation to Backshell Data Index (Continued)			
REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER	
83P-F002A	S3957R24-34	169 00	CM389L-25	
83P-F002B	S3957R10-34	169 00	CM389L-11	
83P-F002C	S3957R24-34	169 00	CM389L-25	
83P-F002D	S3957R14-34	169 00	CM389L-15	
83P-F002E	S3957R14-34	169 00	CM389L-15	
47 83P-F002H	S3957R13-34	168 00	CM389B-13	
47 83P-F002K	S3957R25-34	168 00	CM389B-25	
47 83P-F002L	S3957R13-34	168 00	CM389B-13	
83P-F004	S3957R12-34	169 00	CM389L-13	
46 83P-F015	S3957R10-34	169 00	CM389L-11	
46 83P-F018	S3957R12-34	169 00	CM389L-13	
84J-F042	S3957R24-34	170 00	BT-J-153	
84J-F046	S3957R24-34	170 00	BT-J-150	
84J-H023	S3957R10-34	172 00	CM389L-11	
84J-H024	S3957R10-34	172 00	CM389L-11	
1 84J-H031	S3957R16-34	172 00	CM389L-17	
2 84J-H031	S3957R20-34	172 00	CM389L-21	
84J-H034	S3957R16-34	172 00	CM389L-17	
84J-H092	S3957R12-34	172 00	CM389L-13	
1 84J-J032	S3957R16-34	172 00	CM389L-17	
84J-J033	S3957R16-34	172 00	CM389L-17	
2 84J-K092	S3957R12-34	172 00	CM389L-13	
2 84J-K094	S3957R14-34	172 00	CM389L-15	
2 84J-L095	S3957R14-34	172 00	CM389L-15	
26 84J-M132	S3957R12-34	170 00	BT-J-137	
26 84J-M133	S3957R12-34	170 00	BT-J-137	
84J-P053	S3957R24-34	170 00	BT-J-153	
84J-P055	S3957R20-34	170 00	BT-J-148	
84J-P059	S3957R16-34	170 00	BT-J-143	
84J-P060	S3957R14-34	170 00	BT-J-140	
84J-P067	S3957R14-34	170 00	BT-J-140	
84J-R056	S3957R24-34	170 00	BT-J-153	
84J-R058	S3957R22-34	170 00	BT-J-150	
84J-R064	S3957R14-34	170 00	BT-J-140	
84J-R065	S3957R14-34	170 00	BT-J-140	
84J-R068	S3957R14-34	170 00	BT-J-140	
84P-D012A	S3957R12-34	169 00	CM389L-13	
84P-D012B	S3957R12-34	169 00	CM389L-13	
84P-D033	S3957R16-34	169 00	CM389L-17	
2 84P-E094	S3957R14-34	169 00	CM389L-15	
84P-F001A	S3957R24-34	169 00	CM389L-25	
84P-F001B	S3957R24-34	169 00	CM389L-25	
84P-F001D	S3957R24-34	169 00	CM389L-25	
84P-F001F	S3957R16-34	169 00	CM389L-17	
84P-F001H	S3957R24-34	169 00	CM389L-25	

Figure 37. S3957RXX-34 Backshells (Sheet 8)

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
84P-F001J	S3957R24-34	169 00	CM389L-25
84P-F001L	S3957R24-34	169 00	CM389L-25
84P-F001P	S3957R16-34	169 00	CM389L-17
84P-F002A	S3957R24-34	169 00	CM389L-25
84P-F002B	S3957R24-34	169 00	CM389L-25
84P-F002D	S3957R24-34	169 00	CM389L-25
84P-F002F	S3957R16-34	169 00	CM389L-17
84P-F002H	S3957R24-34	169 00	CM389L-25
84P-F002J	S3957R24-34	169 00	CM389L-25
84P-F002L	S3957R24-34	169 00	CM389L-25
84P-F002P	S3957R16-34	169 00	CM389L-17
84P-F004A	S3957R12-34	169 00	CM389L-13
84P-F004B	S3957R12-34	169 00	CM389L-13
84P-F005A	S3957R12-34	169 00	CM389L-13
84P-F005B	S3957R12-34	169 00	CM389L-13
84P-F006A	S3957R14-34	169 00	CM389L-15
84P-F006B	S3957R14-34	169 00	CM389L-15
84P-F007A	S3957R14-34	169 00	CM389L-15
84P-F007B	S3957R14-34	169 00	CM389L-15
84P-F042	S3957R24-34	169 00	CM389L-25
84P-F046	S3957R24-34	169 00	CM389L-25
84P-H003A	S3957R14-34	169 00	CM389L-15
84P-H003B	S3957R14-34	169 00	CM389L-15
35 84P-J122A	S3957R12-34	169 00	CM389L-13
35 84P-J122B	S3957R12-34	169 00	CM389L-13
39 84P-M021A	S3957R12-34	169 00	CM389L-13
39 84P-M021B	S3957R12-34	169 00	CM389L-13
84P-M029A	S3957R12-34	169 00	CM389L-11
33 84P-M029B	S3957R10-34 S3957R10-34	169 00	CM389L-11
33 84P-M029C	S3957R10-34	169 00	CM389L-11
84P-M029D	S3957R10-34	169 00	CM389L-11
84P-M051	S3957R16-34	169 00	CM389L-17
26 84P-M132	S3957R12-34	169 00	CM389L-13
40 84P-M133	S3957R12-34	169 00	CM389L-13
84P-N052	S3957R16-34	169 00	CM389L-17
37 84P-S017A	S3957R12-34	169 00	CM389L-13
37 84P-S017B	S3957R12-34	169 00	CM389L-13
37 84P-T018A	S3957R12-34	169 00	CM389L-13
37 84P-T018B	S3957R12-34	169 00	CM389L-13
84P-T058	S3957R22-34	169 00	CM389L-23
84P-U013C	S3957R12-34	169 00	CM389L-13
84P-U013D	S3957R12-34	169 00	CM389L-13
84P-V014D	S3957R12-34	169 00	CM389L-13
85P-F001A	S3957R24-34	169 00	CM389L-25
85P-F001B	S3957R20-34	169 00	CM389L-19
85P-F007	S3957R14-34	169 00	CM389L-15

Figure 37. S3957RXX-34 Backshells (Sheet 9)

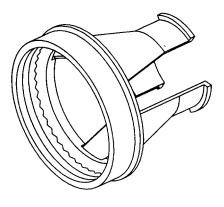
090 00 Page 42

Change 4

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER	
46 85P-K040A	S3957R11-34	168 00	CM389B-11	
46 85P-K040B	S3957R13-34	168 00	CM389B-13	
85P-N002A	S3957R24-34	169 00	CM389L-25	
85P-N002B	S3957R22-34	169 00	CM389L-23	
85P-N002C	S3957R22-34	169 00	CM389L-23	
85P-N002D	S3957R24-34	169 00	CM389L-25	
F/A 10 A	LEG	END		
F/A-18A.				
2 F/A-18B.				
3 161353 THRU 161359				
4 161360 AND UP.				
5 161522 AND UP.				
6 161353 THRU 161924				
7 F/A-18A 161702 AND F/A-18B; ALSO F/A-1	0 UP; .8A 161353 THRU 161528 AF	ΓER F18 AFC 54.		
8 161353 THRU 161528	BEFORE F18 AFC 49.			
9 163119 AND UP.				
161353 THRU 161528				
161737 AND UP.				
12 161353 THRU 161519				
13 F/A-18A 161520 AND				
	U 161947, 162836 AND UP.			
14 161702 AND UP.				
15 F/A-18A 163092 AND	UP.			
16 F/A-18A,	U 161947, 162836 AND UP.			
	SO 161353 THRU 161519 AFT	ED E18 AEC 40		
18 161353 THRU 161924		LK 1 10 AI C +).		
19 161359 AND UP.	BLI OKL I TO THE C 37.			
20 F/A-18A 161702 AND	UP.			
21 162445 AND UP.				
22 161353 THRU 161521				
23 161353 THRU 161987				
24 161520 AND UP.				
25 161353 THRU 161528	BEFORE F18 AFC 41.			
		ER F18 AFC 27.		
	26 161520 AND UP; ALSO 161353 THRU 161519 AFTER F18 AFC 27. 161360 AND UP; ALSO 161353 THRU 161359 AFTER F18 AFC 53.			
2/ F 101300 AND 01, ALSO 101333 111KO 101333 AFTEK F10 AFC 33.				

090 00 Page 43

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER	
28 162394 AND UP; ALSO 161353 THRU 161528 AFTER F18 AFC 49, AND 161702 THRU 161987 AFTER F18 AFC 48.				
29 F/A-18B 163104 AND	UP.			
30 161353 THRU 161519				
31 F/A-18A 161520 AND	UP,			
F/A-18B.				
	O 161248 THRU 161924 AFTI			
	U 161519; ALSO F/A-18B 1613	354 THRU 161360 BEFORE F	18 AFC 27.	
34 162445 AND UP.				
35 161982 AND UP.	10 1 < 1252 TVID II 1 < 1007 A FT	ED E10 4 EC 40		
	O 161353 THRU 161987 AFTI	ER F18 AFC 48.		
37 161720 AND UP.	LID			
38 F/A-18B 161704 AND		260 AERED E10 AEC 27		
· · · · · · · · · · · · · · · · · · ·	SO F/A-18B 161354 THRU 161			
	O 161353 THRU 161360 AFTI	EK F18 AFC 27.		
	AFTER F18 AFC 49 AND 161	702 THRU 161987 REFORE F	F18 AFC 48	
	O 161353 THRU 161528 AFTI		10711 € 10.	
44 161353 THRU 161519		217.		
45 161353 THRU 161987				
	U 163175 AFTER F/A-18 AFC	253 OR AFC 292.		
	47 \ 161925 AND UP AFTER F/A-18 AFC 231.			
48 F/A-18A 162394 THR	U 163175 AFTER F/A-18 AFC	292.		



Reference Designation to Backshell Data Index

	Reference Designation to Backshell Data Index			
REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER	
1P-C005	S3957S8-34	169 00	CM389L-9	
11 1P-C072	S3957S16-34	169 00	CM389L-17	
1P-J084	S3957S12-34	169 00	CM389L-13	
10P-P010	S3957S10-34	169 00	CM389L-11	
6 18J-T014	S3957S8-34	170 00	CM389L-9	
2P-P011	S3957S10-34	169 00	CM389L-11	
2P-P012	S3957S8-34	169 00	CM389L-9	
2 20J-L013	S3957S16-34	172 00	CM389L-17	
2 20J-L014	S3957S8-34	172 00	CM389L-9	
7 22J-D096	S3957S8-34	172 00	CM389L-9	
8 22J-F096	S3957S8-34	172 00	CM389L-9	
22P-A087	S3957S8-34	169 00	CM389L-9	
22P-A089	S3957S8-34	169 00	CM389L-9	
7 22P-D096	S3957S8-34	169 00	CM389L-9	
10 22P-E098	S3957S8-34	169 00	CM389L-9	
8 22P-F096	S3957S8-34	169 00	CM389L-19	
22P-M076	S3957S10-34	169 00	CM389L-11	
22P-M099	S3957S14-34	169 00	CM389L-15	
22P-P012	S3957S8-34	169 00	CM389L-9	
12 22P-R110	S3957S8-34	169 00	CM389L-9	
22P-S023	S3957S8-34	169 00	CM389L-9	
23P-B003	S3957S8-34	169 00	CM389L-9	
25P-H002	S3957S10-34	169 00	CM389L-11	
25P-K004	S3957S10-34	169 00	CM389L-11	
34P-D011	S3957S8-34	169 00	CM389L-9	
25 5P-E035	S3957S10-34	169 00	CM389L-11	
1 5P-E053	S3957S12-34	169 00	CM389L-13	
5P-H027	S3957S14-34	169 00	CM389L-15	
5 5P-M036	S3957S10-34	169 00	CM389L-11	
5 5P-N040	S3957S10-34	169 00	CM389L-11	
5P-P069	S3957S10-34	169 00	CM389L-11	

Figure 38. S3957SXX-34 Backshells (Sheet 1)

Reference Designation to Backshell Data Index (Continued)			
REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
52J-B023	S3957S20-34	172 00	CM389L-21
52J-E007	S3957S24-34	172 00	CM389L-25
52J-E011	S3957S22-34	172 00	CM389L-23
52J-G040	S3957S12-34	172 00	CM389L-13
2 52J-H032	S3957S20-34	172 00	CM389L-21
1 52J-H032	S3957S24-34	172 00	CM389L-25
52J-H034	S3957S24-34	172 00	CM389L-25
22 52J-H088	S3957S10-34	172 00	CM389L-11
52J-J028	S3957S24-34	172 00	CM389L-25
52J-J029	S3957S24-34	172 00	CM389L-25
52J-J042	S3957S24-34	172 00	CM389L-25
15 52J-L160	S3957S16-34	172 00	CM389L-17
52J-M069	S3957S14-34	172 00	CM389L-15
52J-M071	S3957S12-34	172 00	CM389L-13
52J-N070	S3957S14-34	172 00	CM389L-15
52J-N072	S3957S12-34	172 00	CM389L-13
52J-P035	S3957S12-34	170 00	BT-J-132
52J-P110	S3957S24-34	170 00	BT-J-153
52J-P111	S3957S22-34	170 00	BT-J-150
52J-P117	S3957S16-34	170 00	CM389L-17
52J-P123	S3957S14-34	170 00	BT-J-140
16 52J-P166	S3957S12-34	172 00	CM389L-13
21 52J-R036	S3957S12-34	170 00	BT-J-137
12 52J-R113	S3957S24-34	170 00	BT-J-153
52J-R114	S3957S10-34	170 00	BT-J-128
12 52J-R116	S3957S20-34	170 00	BT-J-148
52J-U013	S3957S18-34	172 00	CM389L-19
52J-U015	S3957S18-34	172 00	CM389L-19
52J-U017	S3957S18-34	172 00	CM389L-19
52J-U019	S3957S18-34	172 00	CM389L-19
27 52J-U045A	S3957S24-34	172 00	None
52J-V012	S3957S18-34	172 00	CM389L-19
52J-V014	S3957S18-34	172 00	CM389L-19
52J-V016	S3957S18-34	172 00	CM389L-19
52J-V020	S3957S18-34	172 00	CM389L-19
27 52J-V044A	S3957S24-34	172 00	None
52P-A034	S3957S24-34	169 00	CM389L-25
52P-A046	S3957S24-34	169 00	CM389L-25
52P-B023	S3957S20-34	169 00	CM389L-21
52P-B042	S3957S24-34	169 00	CM389L-25
52P-B156	S3957S8-34	169 00	CM389L-9
2 52P-C032	S3957S20-34	169 00	CM389L-21
1 52P-C032	S3957S24-34	169 00	CM389L-25
2 52P-C033	S3957S14-34	169 00	CM389L-15
52P-C033	S3957S24-34	169 00	CM389L-25

Figure 38. S3957SXX-34 Backshells (Sheet 2)

	Reference Designation to Backshell Data Index (Continued)			
REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER	
52P-C039	S3957S24-34	169 00	CM389L-25	
52P-C159F	S3957S16-34	169 00	CM389L-17	
3 52P-D026A	S3957S16-34	169 00	CM389L-17	
4 52P-D026A	S3957S20-34	169 00	CM389L-21	
4 52P-D026B	S3957S16-34	169 00	CM389L-17	
3 52P-D026B	S3957S20-34	169 00	CM389L-21	
52P-D026C	S3957S24-34	169 00	CM389L-25	
52P-D026D	S3957S14-34	169 00	CM389L-15	
52P-D028	S3957S24-34	169 00	CM389L-25	
52P-D029	S3957S24-34	169 00	CM389L-25	
52P-E007	S3957S24-34	169 00	CM389L-25	
52P-E011	S3957S22-34	169 00	CM389L-23	
27 52P-E059	S3957S24-34	169 00	CM389L-1	
15 52P-F160	S3957S16-34	169 00	CM389L-17	
2 52P-F308	S3957S20-34	169 00	CM389L-19	
17 52P-H075	S3957S14-34	169 00	CM389L-15	
52P-H079	S3957S12-34	169 00	CM389L-13	
52P-H083	S3957S8-34	169 00	CM389L-9	
52P-H084	S3957S12-34	169 00	CM389L-13	
24 52P-H088	S3957S10-34	169 00	CM389L-11	
2 52P-H098	S3957S10-34	169 00	CM389L-11	
52P-J076	S3957S12-34	169 00	CM389L-13	
52P-J078	S3957S16-34	169 00	CM389L-17	
52P-J080	S3957S14-34	169 00	CM389L-15	
52P-J155	S3957S10-34	169 00	CM389L-11	
2 52P-K303	S3957S14-34	169 00	CM389L-15	
1 52P-L154	S3957S10-34	169 00	CM389L-11	
2 52P-L309	S3957S10-34	169 00	CM389L-11	
27 52P-P064A	S3957S12-34	169 00	CM389L-13	
27 52P-P064B	S3957S24-34	169 00	CM389L-25	
16 52P-P165	S3957S22-34	169 00	CM389L-23	
27 52P-R066A	S3957S12-34	169 00	CM389L-13	
27 52P-R066B	S3957S24-34	169 00	CM389L-25	
52P-U013	S3957S18-34	169 00	CM389L-19	
52P-U015	S3957S18-34	169 00	CM389L-19	
52P-U017	S3957S18-34	169 00	CM389L-19	
52P-U019	S3957S18-34	169 00	CM389L-19	
27 52P-U045A	S3957S24-34	169 00	CM389L-25	
27 52P-U045B	S3957S24-34	169 00	CM389L-25	
52P-V012	S3957S18-34	169 00	CM389L-19	
52P-V014	S3957S18-34	169 00	CM389L-19	
52P-V016	S3957S18-34	169 00	CM389L-19	
52P-V020	S3957S18-34	169 00	CM389L-19	
27 52P-V044A	S3957S24-34	169 00	CM389L-25	

Figure 38. S3957SXX-34 Backshells (Sheet 3)

Reference Designation to Backshell Data Index (Continued)			
REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
27 52P-V044B	S3957S24-34	169 00	CM389L-25
60J-A001A	S3957S24-34	172 00	CM389L-25
60J-A001B	S3957S22-34	172 00	CM389L-23
61J-A120	S3957S16-34	172 00	CM389L-17
27 61J-U045	S3957S10-34	170 00	None
27 61J-V044	S3957S10-34	170 00	None
61J-W095A	S3957S24-34	172 00	CM389L-25
61J-W095B	S3957S24-34	172 00	CM389L-23
18 61P-B184	S3957S8-34	169 00	CM389L-9
2 61P-K237	S3957S10-34	169 00	CM389L-11
2 61P-L217	S3957S10-34	169 00	CM389L-11
61P-W209	S3957S10-34	171 00	CM389S-10
10 62J-A030E	S3957S8-34	172 00	CM389L-9
10 62J-B029E	S3957S8-34	172 00	CM389L-9
10 62P-A013A	S3957S12-34	169 00	CM389L-13
10 62P-A030E	S3957S8-34	169 00	CM389L-9
10 62P-B010A	S3957S12-34	169 00	CM389L-13
10 62P-B029E	S3957S8-34	169 00	CM389L-9
10 62P-E009M	S3957S14-34	169 00	CM389L-15
10 64J-E001F	S3957S22-34	172 00	CM389L-23
64P-E001F	S3957S22-34	169 00	CM389L-23
28 68P-E011C	S3957S24-34	169 00	None
27 69J-L016	S3957S13-34	168 00	None
7P-S036A	S3957S14-34	169 00	CM389L-15
7P-T009	S3957S10-34	169 00	CM389L-11
70J-A003	S3957S14-34	172 00	CM389L-15
75J-N001	S3957S10-34	172 00	CM389L-11
27 76P-F041B	S3957S17-34	168 00	CM389T-17A
27 76P-F042B	S3957S17-34	168 00	CM389T-17A
2 76P-K032	S3957S14-34	169 00	CM389L-15
1 78P-K005	S3957S10-34	169 00	CM389L-11
79J-L024	S3957S10-34	172 00	CM389L-11
15 79P-E021B	S3957S8-34	171 00	CM389S-8
19 79P-L021B	S3957S8-34	171 00	CM389S-8
8P-J002	S3957S14-34	169 00	CM389L-15
8P-J042	S3957S16-34	169 00	CM389L-17
8P-L001A	S3957S16-34	169 00	CM389L-17
8P-L001B	S3957S24-34	169 00	CM389L-25
2 80P-L016B	S3957S20-34	200 00	None
27 83J-G003	S3957S14-34	172 00	None
27 83J-H023	S3957S16-34	172 00	None
18 83P-E005	S3957S12-34	169 00	CM389L-13
27 83P-F022	S3957S10-34	169 00	CM389L-11
23 84J-C026B	S3957S12-34	172 00	CM389L-13
23 84J-C026C	S3957S12-34	172 00	CM389L-13

Figure 38. S3957SXX-34 Backshells (Sheet 4)

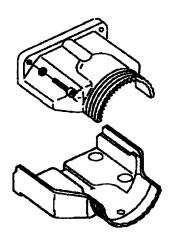
	rence Designation to Backshell Data Index (Continued)			
REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER	
1 84J-E041	S3957S24-34	172 00	CM389L-25	
84J-E044	S3957S24-34	172 00	CM389L-25	
1 84J-E045	S3957S24-34	172 00	CM389L-25	
84J-E048	S3957S24-34	172 00	CM389L-25	
1 84J-F043	S3957S24-34	172 00	CM389L-25	
1 84J-F047	S3957S24-34	172 00	CM389L-25	
20 84J-H092	S3957S12-34	172 00	CM389L-13	
84J-J025A	S3957S12-34	172 00	CM389L-13	
84J-J025B	S3957S12-34	172 00	CM389L-13	
2 84J-J032	S3957S20-34	172 00	CM389L-17	
84J-J093	S3957S12-34	172 00	CM389L-13	
23 84J-J122A	S3957S12-34	172 00	CM389L-13	
23 84J-J122B	S3957S12-34	172 00	CM389L-13	
2 84J-L097A	S3957S12-34	172 00	CM389L-13	
2 84J-L097B	S3957S12-34	172 00	CM389L-13	
84J-M051	S3957S16-34	172 00	CM389L-17	
84J-N052	S3957S16-34	172 00	CM389L-17	
2 84J-P041	S3957S24-34	172 00	CM389L-25	
2 84J-P045	S3957S24-34	172 00	CM389L-25	
84J-P054	S3957S22-34	170 00	BT-J-150	
2 84J-R043	S3957S24-34	172 00	CM389L-25	
2 84J-R047	S3957S24-34	172 00	CM389L-25	
84J-R057	S3957S22-34	170 00	BT-J-150	
84J-S063	S3957S10-34	170 00	BT-J-132	
84J-U049	S3957S14-34	170 00	BT-J-140	
84J-V050	S3957S14-34	170 00	BT-J-140	
7 84P-C026	S3957S12-34	169 00	CM389L-13	
1 84P-C031	S3957S16-34	169 00	CM389L-17	
2 84P-C031	S3957S20-34	169 00	CM389L-19	
84P-C034	S3957S16-34	169 00	CM389L-17	
1 84P-C092	S3957S12-34	169 00	CM389L-13	
1 84P-D032	S3957S16-34	169 00	CM389L-17	
2 84P-D032	S3957S20-34	169 00	CM389L-19	
84P-D093	S3957S12-34	169 00	CM389L-13	
84P-E041	S3957S24-34	169 00	CM389L-25	
84P-E044	S3957S24-34	169 00	CM389L-25	
84P-E045	S3957S24-34	169 00	CM389L-25	
84P-E048	S3957S24-34	169 00	CM389L-25	
2 84P-E092	S3957S12-34	169 00	CM389L-13	
84P-F043	S3957S24-34	169 00	CM389L-25	
84P-F047	S3957S24-34	169 00	CM389L-25	
2 84P-F095	S3957S14-34	169 00	CM389L-15	
84P-J104	S3957S10-34	169 00	CM389L-11	
26 84P-J122A	S3957S12-34	169 00	CM389L-13	
26 84P-J-122B	S3957S12-34	169 00	CM389L-13	

Figure 38. S3957SXX-34 Backshells (Sheet 5)

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	TOOL CASE TOOL NUMBER
14 84P-M021A	S3957S12-34	169 00	CM389L-13
9 84P-M021B	S3957S12-34	169 00	CM389L-13
14 84P-M021C	S3957S12-34	169 00	CM389L-13
9 84P-M021D	S3957S12-34	169 00	CM389L-13
23 84P-M029B	S3957S10-34	169 00	CM389L-11
8 84P-M029C	S3957S10-34	169 00	CM389L-11
23 84P-M110A	S3957S12-34	169 00	CM389L-13
13 84P-M110B	S3957S12-34	169 00	CM389L-13
84P-S055	S3957S20-34	169 00	CM389L-21
84P-U013A	S3957S12-34	169 00	CM389L-13
84P-U049	S3957S14-34	169 00	CM389L-15
84P-V014A	S3957S12-34	169 00	CM389L-13
84P-V014C	S3957S12-34	169 00	CM389L-13
84P-V050	S3957S14-34	169 00	CM389L-15
9P-P005	S3957S14-34	169 00	CM389L-15
LEGEND			

84P-V014A	3393/312-34	169 00	CM389L-13		
84P-V014C	S3957S12-34	169 00	CM389L-13		
84P-V050	S3957S14-34	169 00	CM389L-15		
9P-P005	S3957S14-34	169 00	CM389L-15		
		LEGEND	•		
F/A 19A		LLOLIND			
F/A-18A. 7. F/A-18B.					
2 F/A-18B. 3 161360 AND UP.					
4 161353 THRU 161359	•				
5 161353 THRU 161357					
6 162826 AND UP.	•				
7 151353 THRU 161519) <u>.</u>				
8 161520 AND UP;	•				
ALSO F/A-18B 16135	4 THRU 161360 AFTI	ER F18 AFC 27.			
9 161353 THRU 161360	BEFORE F18 AFC 27	7.			
161702 AND UP.					
162394 AND UP; ALS	SO 161702 THRU 1619	987 AFTER F18 AFC 48.			
12 F/A-18A 161353,					
F/A-18B 161354 THR	U 161947, 162836 AN	D UP.			
13 161361 AND UP; ALS					
14 161353 THRU 161519		7.			
15 F/A-18B 161704 AND	UP.				
16 162445 AND UP.					
17 161353 THRU 161715					
18 161925 AND UP.	LID				
19 F/A-18A 161702 AND					
	20 F/A-18A 161353 THRU 162909.				
	21 F/A-18A,				
	F/A-18B 161354 THRU 161947, AND 162836 AND UP. 161702 AND UP; ALSO 161353 THRU 161528 AFTER F18 AFC 41.				
	22 161702 AND UP; ALSO 161353 THRU 161528 AFTER F18 AFC 41. 23 161520 AND UP; ALSO 161353 THRU 161519 AFTER F18 AFC 27.				
24 161353 THRU 161528		717 M TERT 10 M C 27.			
25 F/A-18A 161353 THR		AFC 39.			
26 161520 THRU 161981					
	77 F/A-18A 162394 THRU 163175 AFTER F/A-18 AFC 253 OR AFC 292.				
28 161925 AND UP AFTER F/A-18 AFC 231.					

Figure 38. S3957SXX-34 Backshells (Sheet 6)



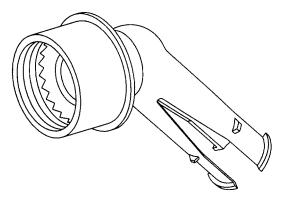
Reference Designation to Adapter Data Index

REFERENCE DESIGNATION	ADAPTER	REFERENCE WORK PACKAGE	TOOL NUMBER	
1 80P-L016B	J1317	200 00	None	
LEGEND T F/A-18B				



Reference Designation to Adapter Data Index

REFERENCE	ADAPTER	REFERENCE WORK	TOOL CASE	
DESIGNATION		PACKAGE	TOOL NUMBER	
25P-H002	G8682-11NF	169 00	CM389L-11	
25P-K004	G8682-11NF	169 00	CM389L-11	
LEGEND				
<u>1</u> F/A-18B				



Reference Designation to Backshell Data Index

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	ADAPTER TOOL
76P-F041E	S3957A17-34	168 00	CM389L-17
78P-E016K	S3957A16-34	169 00	CM389L-17
78P-E016M	S3957A14-34	169 00	CM389L-15

Figure 41. S3957AXX-34 Backshells

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

TAPE WRAPPED THERMAL BARRIER PROTECTIVE BOOT INSTALLATION FOR ENVIRONMENTAL TYPE CONNECTORS WITH MOLDED PLASTIC CABLE CLAMPS

Reference Material

None

Alphabetical Index

Subject	Page No.
Description	2
Materials Required	2
Procedure	2
Adapter Tool Mating, Figure 2	4
CM Adapter Tool Part Numbering System, Figure 1	4
CM Adapter Tools	2
Disassembly Procedure	3
Hot Spotz Tape Removal, Figure 8	8
Hot Spotz Tape, Table 5	14
Installing Cable Clamp and Cable Clamp Locking Nut, Figure 12	10
Installing Cable Clamp Locking Nut and Cable Clamp on Cable Assembly, Figure 11	9
Installing Reinforced Silicone Rubber Tape, Figure 15	11
Installing Silicone Rubber Tape, Figure 14	11
Installing Mini Band, Figure 17	13
Loosening Position of Wrench, Figure 5	6
Mini Band Removal, Figure 9	8
Mini Band, Table 3	13
MIL-I-46852, TYPE 2, 1.000 IN., RED Insulation Tape Boot Removal, Figure 7	7
MIL-I-46852, TYPE 2, 1.000 IN., RED Insulation Tape, Table 6	15
Positioning Tape Buildup and Spiral Wrap, Figure 16	12
Preparing Silicone Rubber Tape, Figure 13	10
Reassembly Procedure	3
Reinforced Silicone Rubber Tape, Table 2	12
Silicone Rubber Tape, Table 1	11
Spot Tie Removal, Figure 6	7
Strap Wrench	3
Strap Wrench Setup and Adjustment, Figure 3	5
Tape Removal, Figure 10	9
Tape Wrapping of Boot Area, Figure 18	13
Teflon Barrier Tape, Table 4	14
Tightening Position of Wrench, Figure 4	6
Wrapping Hot Spotz Tape Boot, Figure 19	14
Wrapping MIL-I-46852, TYPE 2, 1.000 IN., RED Insulation Tape Boot, Figure 20	15
Reference Designation to Figure Number Index	2
Support Equipment Required	2
S2160 Adapter, Figure 23	17
S3957SXX-34 Backshell, Figure 21	16
S3957RXX-34 Backshell Figure 22	17

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 225	-	Addition of Mux 4 and 5 (ECP MDC-F/A-18-00529)	1 Sep 02	-
F/A-18 AFC 231	-	Addition of Embedded GPS/INS (ECP MDC-F/A-18-00521)	1 Sep 02	-
F/A-18 AFC 253	-	U. S. Naval Reserves A+ Avionics Upgrade; Incorporation of (ECP MDA-F/A-18-0560R1)	1 Sep 02	-
F/A-18 AFC 292	-	U. S. Marine Corps Reserves A+ Avionics Upgrade; Incorporation of (ECP MDA-F/A-18-0583)	1 Sep 02	-

Reference Designation to Figure Number Index

Reference Designation	Figure No.
22P-S024	21
22P-S025	22
22P-T022	22
5P-P071 (Adapter)	23
84P-S015A	21
84P-S015B	21
84P-S015C	21
84P-S015D	21
84P-T016A	22
84P-T016B	21
84P-T016C	21
84P-T016D	21

1. DESCRIPTION.

2. This work package describes procedures for installing thermal barrier protective boots on environmental type connectors with molded plastic cable clamp.

Support Equipment Required

Part Number or Type Designation 3308AS100

Nomenclature
Wire and Connector

Repair Set

Materials Required

Specification or Part Number	Nomenclature
See Table 1	Silicone Rubber Tape
See Table 2	Reinforced Silicone
	Rubber Tape
See Table 3	Mini Band
See Table 4	Teflon Barrier Tape
See Table 5	Hot Spotz Tape
See Table 6	Insulation Tape
MIL-T-43435, TYPE 4,	Lacing Tape
SIZE-3, FINISH-D	
SR98	Silicone Varnish

3. PROCEDURE.

- 4. **CM ADAPTER TOOLS.** CM adapter tools as shown in figure 1 are used to hold connector in place while cable clamp locking nut is being removed. To use CM adapter tool, do substeps below:
- a. Select CM adapter tool by matching CM adapter tool shell size with shell size of connector.



Spinning CM adapter tool on connector to align keyways causes unnecessary wear to tools, keys and keyways. For correct alignment, align white dot on CM adapter tool with master keyway on connector.

A1-F18AC-WRM-000

Change 4

- b. Mate adapter tool to CM connector. See figure 2.
- 5. **STRAP WRENCH.** Strap wrenches are used to loosen or tighten cable clamp locking nuts, backshell adapters, and similar conditions. To use strap wrench, do substeps below:
- a. Install strap around part to be loosened or tightened and draw strap tight through locking link so part and strap rest on nose of wrench. See figure 3.

NOTE

For more gripping force on CM adapter tool, use T-handle.

- b. To tighten cable clamp locking nut, apply force in a clockwise direction as viewed from rear of connector. Strap and cable clamp locking nut are tucked under nose of wrench and against the flat. See figure 4
- c. To loosen cable clamp locking nut, install strap wrench and turn in a counterclockwise direction as viewed from rear of connector. See figure 5.
- 6. **DISASSEMBLY PROCEDURE.** To disassemble plastic cable clamp from connector, do substeps below:

CAUTION

When cutting boot material with a sharp tool, be careful not to nick or scrape the wire insulation under the cut.

- a. Cut and remove spot tie securing MIL-I-46852, TYPE 2, 1.000 IN., RED insulation tape boot to cable assembly. See figure 6.
- b. Unwrap or cut MIL-I-46852, TYPE 2, 1.000 IN., RED insulation tape and remove from boot area. See figure 7.
- c. Unwrap or cut hot spotz tape and remove from boot area. See figure 8.
- d. Remove teflon barrier tape wrap from mini band. See figure 9.
- e. Remove mini band from cable clamp using DBS-1200 termination tool. See figure 9.
- f. Remove cable clamp and cable clamp locking nut from connector. See figure 10. If required use

strap wrench and CM adapter tool to loosen cable clamp locking nut. See figure 5.

g. Slide cable clamp locking nut and cable clamp onto cable assembly braid. See figure 10.



Use of a sharp tool to cut silicone rubber tape boot from cable assembly can cause wire insulation damage below cut. Be careful not to damage wiring insulation.

h. Cut or unwrap reinforced silicone rubber tape buildup and silicone rubber tape covering boot area. See figure 10.

7. REASSEMBLY PROCEDURE.

- a. Slide cable clamp and cable clamp locking nut on cable assembly and install connector. See figure 11.
- b. Slide cable clamp and cable clamp locking nut on rear of connector and tighten. See figure 12. If required, use strap wrench and CM adapter tool. See figure 4.
- c. Cut silicone rubber tape into a triangular section. See figure 13.

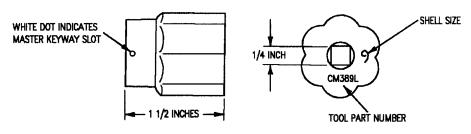
NOTE

For best results when applying silicone rubber tape, hands should be free of dirt and oil.

- d. Position trimmed part of silicone rubber tape immediately in back of and parallel to back of cable clamp.
- e. Spiral wrap silicone rubber tape two or three turns around exposed wires using 50% overlap. See figure 14.
- f. Apply a buildup of reinforced silicone rubber tape around spiral wrapped silicone rubber tape. See figure 15.



To prevent damage to wire terminations, make sure wires are not abnormally stressed.



MIL-C-38999 SERIES 1



Figure 1. CM Adapter Tool Part Numbering System

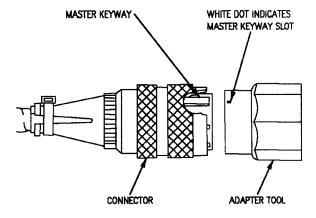
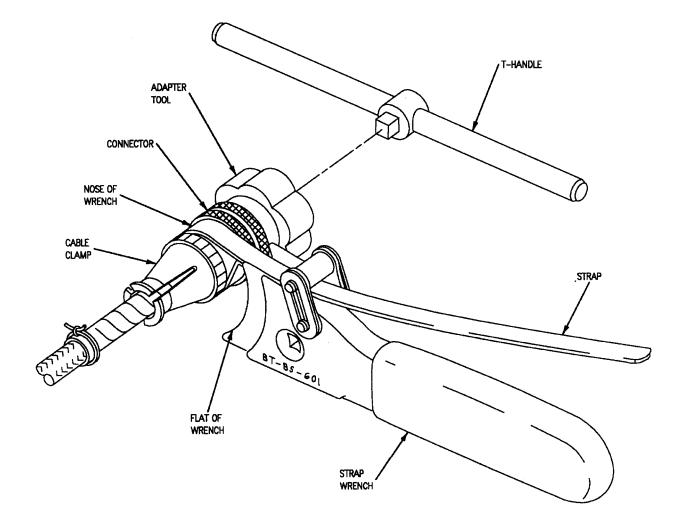
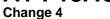


Figure 2. Adapter Tool Mating





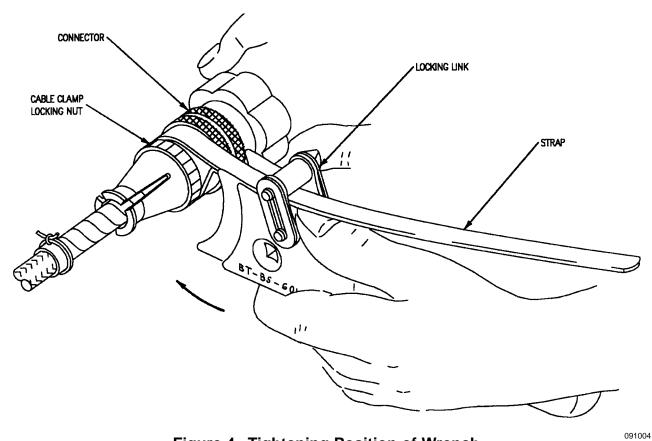


Figure 4. Tightening Position of Wrench

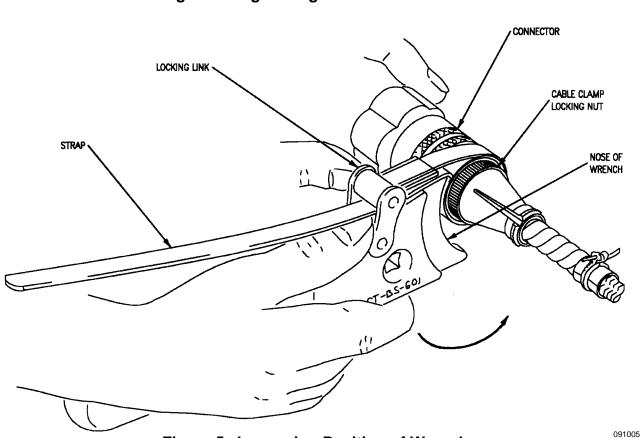


Figure 5. Loosening Position of Wrench

091007

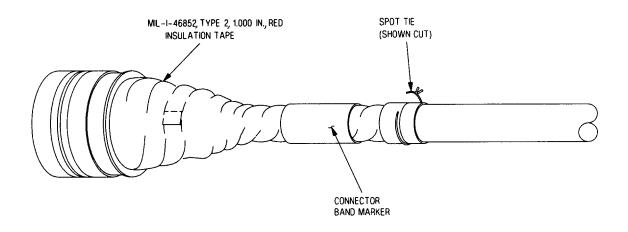


Figure 6. Spot Tie Removal

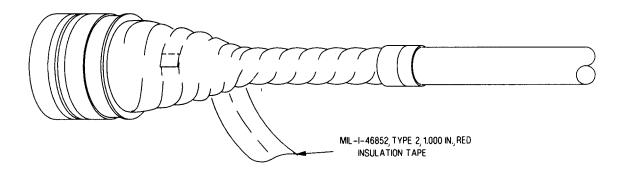


Figure 7. MIL-I-46852, TYPE 2, 1.000 IN., RED Insulation Tape Boot Removal

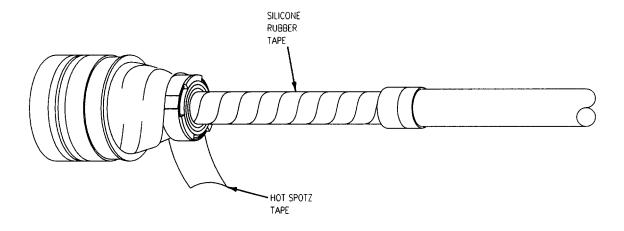


Figure 8. Hot Spotz Tape Removal

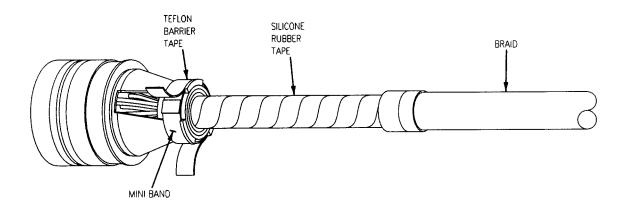


Figure 9. Mini Band Removal

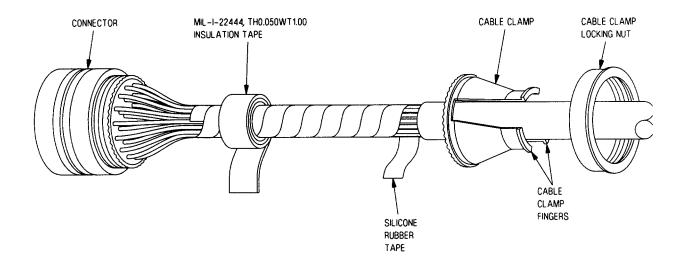


Figure 10. Tape Removal

CONNECTOR

CABLE CLAMP
LOCKING NUT

CABLE
ASSEMBLY

Figure 11. Installing Cable Clamp Locking Nut and Cable Clamp on Cable Assembly

091011

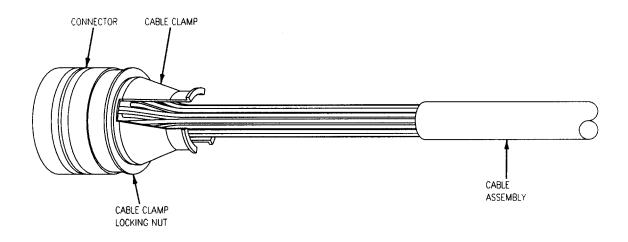


Figure 12. Installing Cable Clamp and Cable Clamp Locking Nut

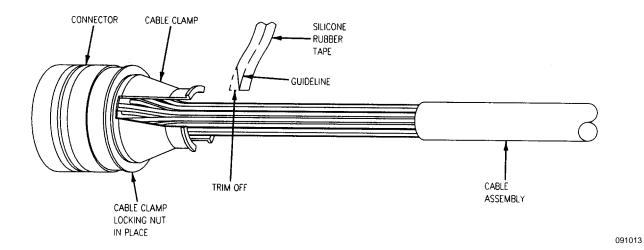


Figure 13. Preparing Silicone Rubber Tape

Page 11

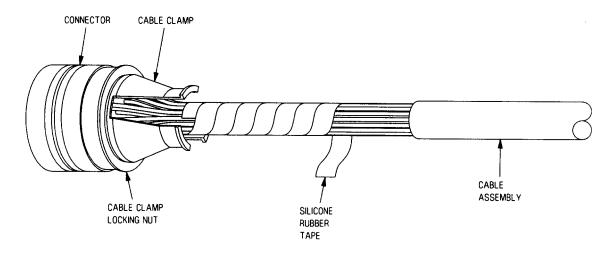


Figure 14. Installing Silicone Rubber Tape

091014

Table 1. Silicone Rubber Tape

PART NUMBER	CAGE	WIDTH (INCH)
604-1	07099	1.000

SELF - BONDING

TAPE COMES IN ROLLS

COLOR - BLACK

TEMPERATURE RANGE: -178° TO +500°F

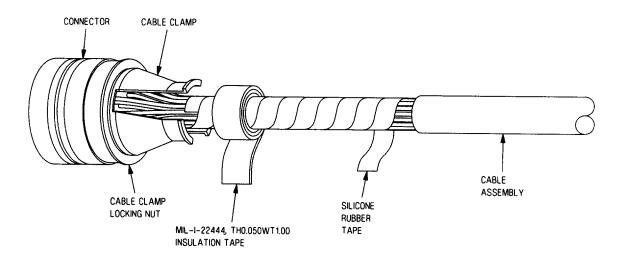


Figure 15. Installing Reinforced Silicone Rubber Tape

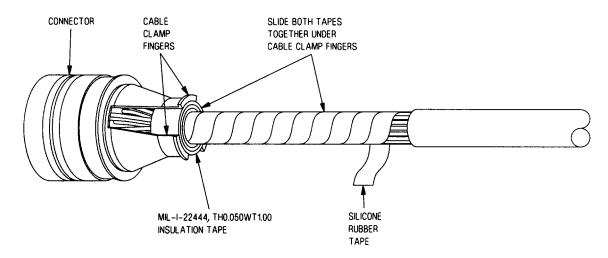


Figure 16. Positioning Tape Buildup and Spiral Wrap

Table 2. Reinforced Silicone Rubber Tape

PART NUMBER	CAGE	WIDTH (INCH)
S-5025	07099	1/2
S-80	07099	1/2

REINFORCED WITH FIBERGLASS

SELF - BONDING

TAPE COMES IN ROLLS

COLOR - BLACK

TEMPERATURE RANGE: -178° TO +500°F

- g. Apply forward pressure to tape buildup and spiral wrap until buildup is under cable clamp fingers. See figure 16.
- h. Install S3175-4 mini band on cable clamp using DBS-1200 termination tool. See figure 17.

NOTE

Tape wrapping must follow cable assembly contour with no unnecessary buildup. Follow tape guideline and keep tape firmly stretched.

i. Spiral wrap, using same continuous length of silicone rubber tape, over exposed wire on braided cable jacket using 50% overlap.

j. Overlap silicone rubber tape on braided cable jacket a minimum of 1/2-inch to prevent wiring exposure during cable assembly flexing.

NOTE

Do not keep tape stretched while doing next step.

- k. Terminate silicone rubber tape by wrapping one full turn around cable assembly. Keep tape guideline at right angle to cable assembly. See figure 18.
- 1. Wrap three to four turns of teflon barrier tape around mini band to cover any sharp edges.

A1-F18AC-WRM-000

Change 4

m. Wrap hot spotz thermal barrier tape one complete turn around connector backshell, do not cover drain holes. Continue wrapping with a 50% overlap. Wrap back over exposed wiring on cable assembly braid about 1/2 inch. Terminate tape by wrapping one full turn around and perpendicular to cable axis. See figure 19.

NOTE

Wrap permacel tape in same direction as hot spotz tape was applied.

n. Wrap MIL-I-46852, TYPE 2, 1.000 IN., RED insulation tape over hot spotz tape starting with one

complete turn around connector backshell, do not cover drain holes. Continue wrapping with a 50% overlap, ending wrap where hot spotz tape ended. Terminate tape by wrapping one full turn around and perpendicular to cable axis.

o. Secure in place with spot tie lacing tape. After tying lacing tape, apply enough silicone varnish to secure knot and cover the cut ends. See figure 20.

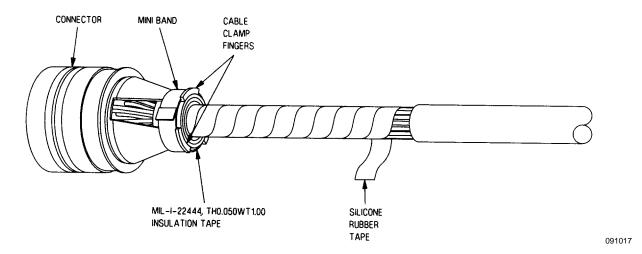


Figure 17. Installing Mini Band

Table 3. Mini Band

PART NUMBER	CAGE	WIDTH (INCH)		
S3175-4	07418	3/16		
TEMPERATURE RANGE: -55° TO +150°F				

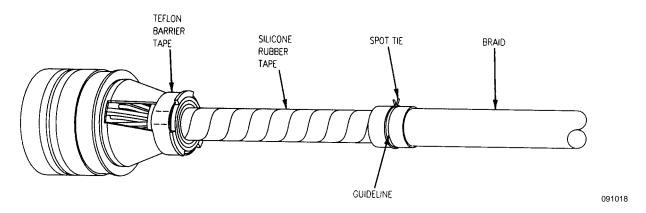


Figure 18. Tape Wrapping of Boot Area

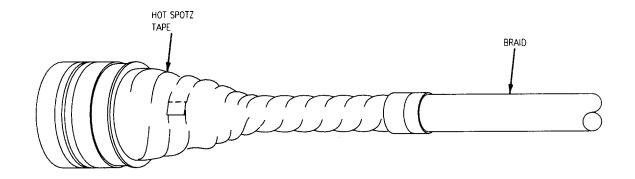


Figure 19. Wrapping Hot Spotz Tape Boot

Table 4. Teflon Barrier Tape

PART NUMBER	CAGE	WIDTH (INCH)
62	20999	1/2

TAPE COMES IN ROLLS COLOR - WHITE OR BROWN

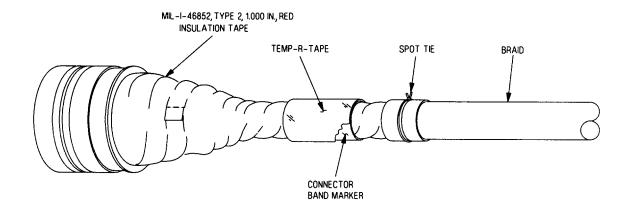
TEMPERATURE RANGE: -130° TO +500°F

Table 5. Hot Spotz Tape

PART NUMBER	CAGE	WIDTH (INCH)
AF100A	62088	1
AF150A	62088	1 1/2

TAPE COMES IN ROLLS COLOR - SILVER

TEMPERATURE RANGE: -178° TO +500°F



091020

Figure 20. Wrapping MIL-I-46852, TYPE 2, 1.000 IN., RED Insulation Tape Boot

Table 6. MIL-I-46852, TYPE 2, 1.000 IN., RED Insulation Tape

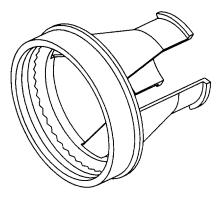
PART NUMBER	CAGE	WIDTH (INCH)
MIL-I-46852, TYPE 2, 1.000 IN., RED	81349	1

SELF - BONDING

TAPE COMES IN ROLLS

COLOR - RED

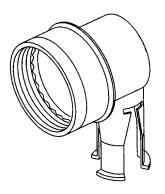
TEMPERATURE RANGE: -178° TO +500°F



Reference Designation to Backshell Data Index

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	ADAPTER TOOL
22P-S024	S3957S8-34	169 00	CM389L-9
84P-S015A	S3957S12-34	169 00	CM389L-13
84P-S015B	S3957S12-34	169 00	CM389L-13
84P-S015C	S3957S12-34	169 00	CM389L-13
84P-S015D	S3957S12-34	169 00	CM389L-13
84P-T016B	S3957S12-34	169 00	CM389L-13
84P-T016C	S3957S12-34	169 00	CM389L-13
84P-T016D	S3957S12-34	169 00	CM389L-13

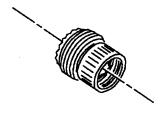
Figure 21. S3957SXX-34 Backshell



Reference Designation to Backshell Data Index

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	ADAPTER TOOL
22P-S025	S3957R10-34	169 00	CM389L-11
22P-T022	S3957R8-34	169 00	CM389L-9
84P-T016A	S3957R12-34	169 00	CM389L-13

Figure 22. S3957RXX-34 Backshell



091023

Reference Designation to Backshell Data Index

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	ADAPTER TOOL
5P-P071	S2160-0609-34	169 00	CM389L-11

Figure 23. S2160 Adapter

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE **WIRING REPAIR WITH PARTS DATA**

KP-8610-120-602 (MIL-C-39012) COAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair with Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No.
Coaxial Cable Strippers 45-163 Adjustment and Use	3
Depth of Cut Adjustment	4
Distance Adjustment	3
Use	5
Crimping Operation, Figure 6	6
Crimp Tool M22520/5-01 Assembly and Use	6
Crimp Procedure	6
Die Installation	6
Die Removal	7
Description	2
Die Installation, Figure 5	6
Distance Adjustment, Figure 1	3
Jacket Cut Adjustment, Figure 2	4
KP-8610-120-602 Coaxial Connector Repair, Figure 9	8
Lower Die Removal, Figure 8	7
Materials Required	2
Operation, Figure 4	5
Procedure	2
Reference Designation to Figure Number Index	2
Shield Cut Adjustment, Figure 3	5
Support Equipment Required	2
Upper Die Removal, Figure 7	7

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

Reference Designation

Figure No.

61P-Y100B

9

1. **DESCRIPTION.**

2. The KP-8610-120-602 coaxial connector is a straight, lanyard release plug (RG 400 cable) and has a temperature range of -65° to $+329^{\circ}$ F. It is not repairable.

Support Equipment Required

Part Number or Type Designation

Nomenclature

HT-900

Heat Tool

3308AS100

Repair Set - Wire and

Connector

1317AS100-1

Nitrogen Servicing

Unit - NAN-3

Materials Required

Specification

or Part Number

Nomenclature

MS23053/5-XXX-0

Shrink Sleeve

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table within this work package for correct figure.

5. COAXIAL CABLE STRIPPERS 45-163 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

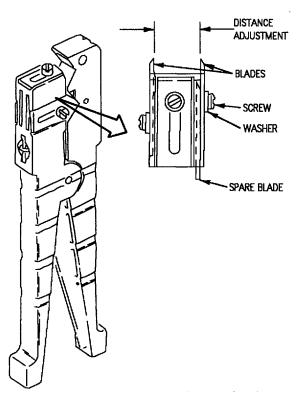
6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting two spare blades will change distance between blades 3/64-inch.

- c. Install screws and tighten handtight.
- d. Adjust depth of cut.



F/A-18-WRM-(409-2)01-SCAN

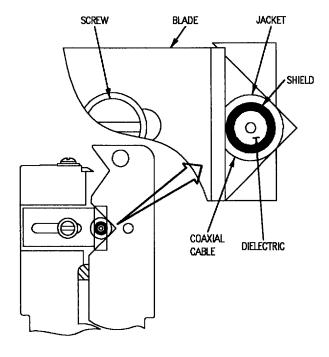
Figure 1. Distance Adjustment

7. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.



F/A-18-WRM-(409-3)01-CATI

Figure 2. Jacket Cut Adjustment

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

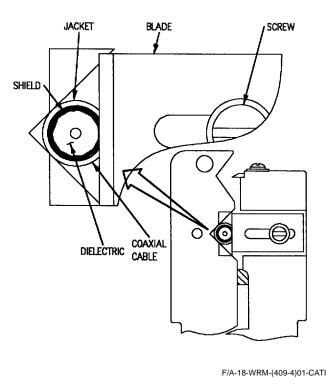


Figure 3. Shield Cut Adjustment

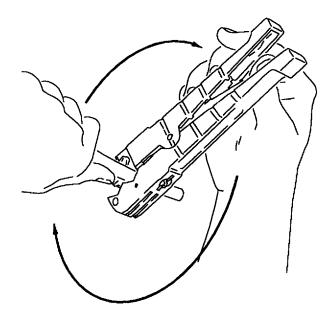
8. USE.

a. Position stripper on cable so that blades face down. See figure 4.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.



F/A-18-WRM-(409-1)01-SCAN

Figure 4. Operation

9. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

10. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 5.
- b. Close handle to make sure dies are correctly seated and locked in place.

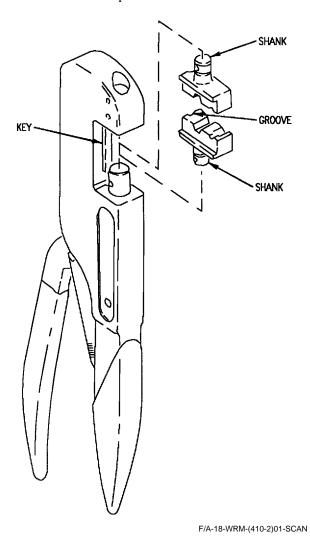


Figure 5. Die Installation

11. CRIMP PROCEDURE.

- a. Position crimping material in correct cavity of dies. See figure 6.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

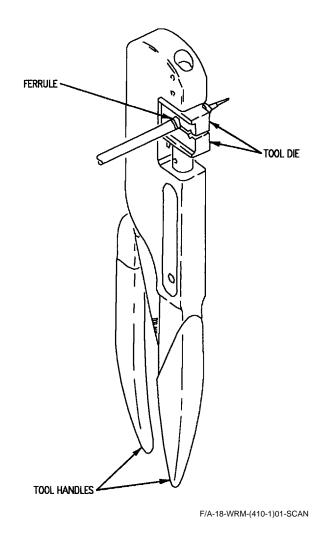


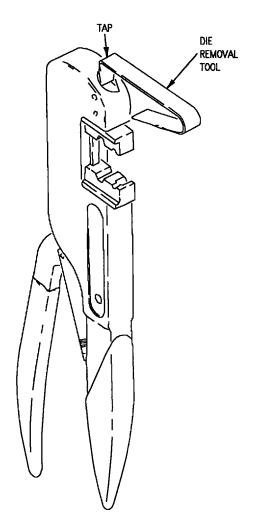
Figure 6. Crimping Operation

12. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 7.



F/A-18-WRM-(410-3)01-SCAN

Figure 7. Upper Die Removal

- b. The die will be released from the lock spring and ejected 1/16 inch. The die can now be removed by hand.
- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 8.

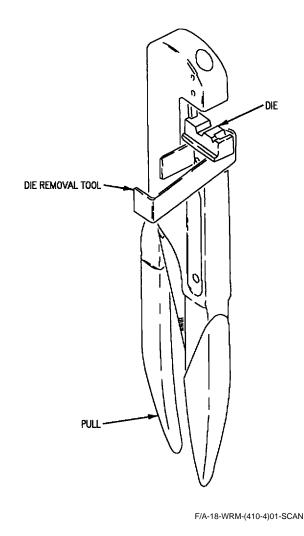


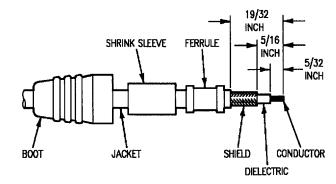
Figure 8. Lower Die Removal

d. Pull handle open with a snap action. The die will be released from the lock spring and can be removed by hand.

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

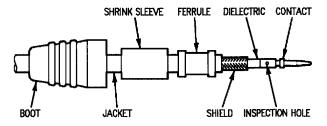
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Slide boot away from connector end of cable. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-163 for cable with 9/32-inch between blades see (paragraph 5). Strip cable jacket 19/32-inch and shield 5/16-inch. Using sharp knife, remove 5/32-inch of dielectric.



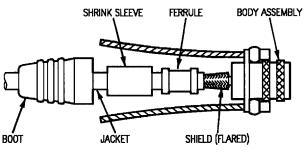
F/A-18-WRM-(310-2)01-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using Y204 die set and M22520/5-01 crimping tool frame, crimp contact in the B cavity of die set see (paragraph 9).



F/A-18-WRM-(320-3)01-CATI

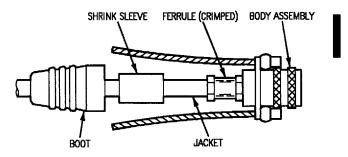
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(330-4)01-CATI

Figure 9. KP-8610-120-602 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using Y572 die set and M22520/5-01 crimping tool frame, crimp ferrule in "B" cavity of die set (see paragraph 9).



F/A-18-WRM-(340-4)01-CATI

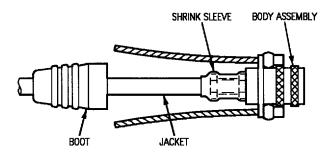
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

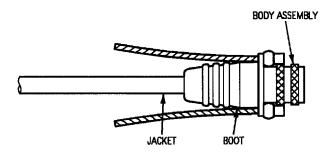
Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.



F/A-18-WRM-(350-4)01-CATI

7. Slide boot over assembly.



F/A-18-WRM-(360-1)01-CATI

Figure 9. KP-8610-120-602 Coaxial Connector Repair (Sheet 2)

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

31-3228-(), 31-3229-(), 31-4229-(), 82-3223-(), 82-5627-() AND 82-5676-1 (MIL-C-39012) COAX CONNECTOR REPAIR

Reference Material

Electrical System	.C-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No.
Coaxial Cable Strippers 45-164 and 45-165 Adjustment and Use	3
Depth of Cut Adjustment	4
Distance Adjustment	3
Use	5
Crimping Operation, Figure 6	6
Crimp Tool M22520/5-01 Assembly and Use	5
Crimp Procedure	6
Die Installation	5
Die Removal	6
Crimp Tool Handle M22520/1-01 Assembly and Adjustments	8
Adjusting Turret Head Before Crimping	9
Removal and Installation of Turret Head	8
Setting Selector Knob Using Turret Head	9
Description	2
Die Installation, Figure 5	5
Distance Adjustment, Figure 1	3
Jacket Cut Adjustment, Figure 2	4
Lower Die Removal, Figure 8	7
Materials Required	2
M22520/1-01 Crimp Tool Handle and Turret Head, Figure 9	8
Operation, Figure 4	5
Procedure	2
Reference Designation to Figure Number Index	2
Shield Cut Adjustment, Figure 3	4
Support Equipment Required	2
Upper Die Removal, Figure 7	6
31-3228-1001, 31-3228-1002, 31-3228-1004, 31-3228-1005 and 31-3228-1006 Coaxial Connector	
Repair, Figure 10	10

Alphabetical Index (Continued)

Subject	Page No
31-3229-1001, 31-3229-1002 and 31-3229-1004 Coaxial Connector Repair, Figure 11	12
31-4229-1001 and 31-4229-1002 Coaxial Connector Repair, Figure 12	14
82-3223-1, 82-3223-2, 82-3223-3 and 82-3223-4 Coaxial Connector Repair, Figure 13	16
82-5627-1 and 82-5627-2 Coaxial Connector Repair, Figure 14	18
82-5676-1 Coaxial Connector Repair, Figure 15	20

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

Support Equipment Required

Reference Designation	Figure No.	Type Designation
		HT-900
60P-E007	13	3308AS100
1 61P-E013	10	
69P-F007	13	1317AS100-1
71P-B004	15	13171131001
72P-A002D	12	
72P-A002F	12	Mat
74P-B007	11	iviat
74P-B008	11	Cunnification
76P-B018	14	Specification
76P-F004C	10	or Part Number
76P-F004D	10	MG22052/5 WWW 0
76P-F004F	10	MS23053/5-XXX-0
76P-F004G	10	• BBOOEBUBE
76P-F004H	10	3. PROCEDURE
76P-F019	13	
76P-F029	11	
2 77P-F003B	11	
78P-B007	14	•
78P-E008	13	
	-	To prevent dam

LEGEND



1. DESCRIPTION.

2. These connectors are single conductor, crimp type coax plugs. There are two types of connectors, straight and right angle. These connectors have a temperature range of -85° to +392°F. They are not repairable.

Part Number or Type Designation	Nomenclature
HT-900	Heat Tool
3308AS100	Repair Set - Wire and Connector
1317AS100-1	Nitrogen Servicing Unit - NAN-3
Materials	s Required
Specification or Part Number	Nomenclature

CEDURE.



Shrink Sleeve

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table within this WP for correct figure.

5. COAXIAL CABLE STRIPPERS 45-164 AND 45-165 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

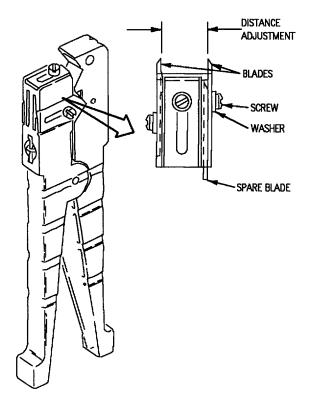
6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting two spare blades will change distance between blades 3/64-inch.

- c. Install screws and tighten finger tight.
- d. Adjust depth of cut.



F/A-18-WRM-(409-2)01-SCAN

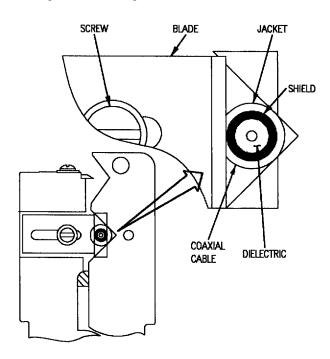
Figure 1. Distance Adjustment

7. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax blade so it cuts before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.



F/A-18-WRM-(409-3)01-CATI

Figure 2. Jacket Cut Adjustment

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

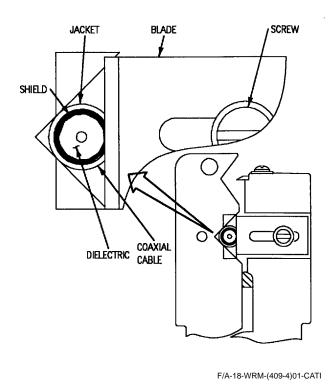


Figure 3. Shield Cut Adjustment

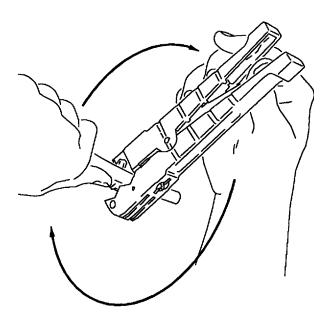
8. USE.

a. Position stripper on cable so that blades face down. See figure 4.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.



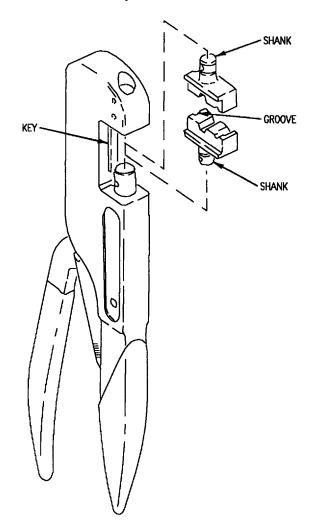
F/A-18-WRM-(409-1)01-SCAN

Figure 4. Operation

9. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

10. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 5.
- b. Close handle to make sure dies are correctly seated and locked in place.



F/A-18-WRM-(410-2)01-SCAN

Figure 5. Die Installation

11. CRIMP PROCEDURE.

- a. Position crimping material in correct cavity of dies. See figure 6.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

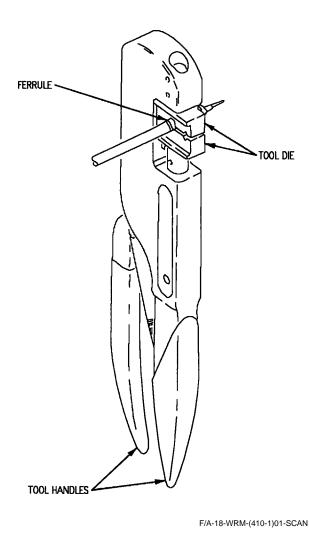


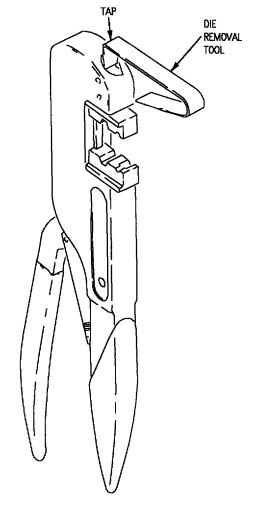
Figure 6. Crimping Operation

12. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

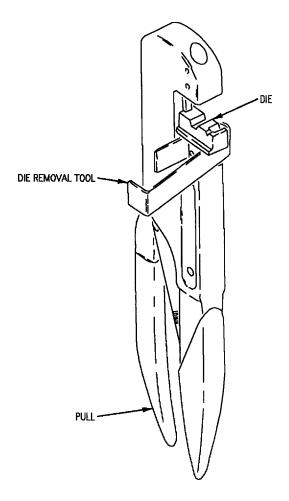
a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 7.



F/A-18-WRM-(410-3)01-SCAN

Figure 7. Upper Die Removal

- b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.
- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 8.



F/A-18-WRM-(410-4)01-SCAN

Figure 8. Lower Die Removal

d. Pull handle open with a snap action. The die will be released from the lock spring and can be removed by hand.

13. CRIMP TOOL HANDLE M22520/1-01 ASSEMBLY AND ADJUSTMENTS.

NOTE

Make sure crimp tool is operating correctly by using M22520/3-1 inspection gage.

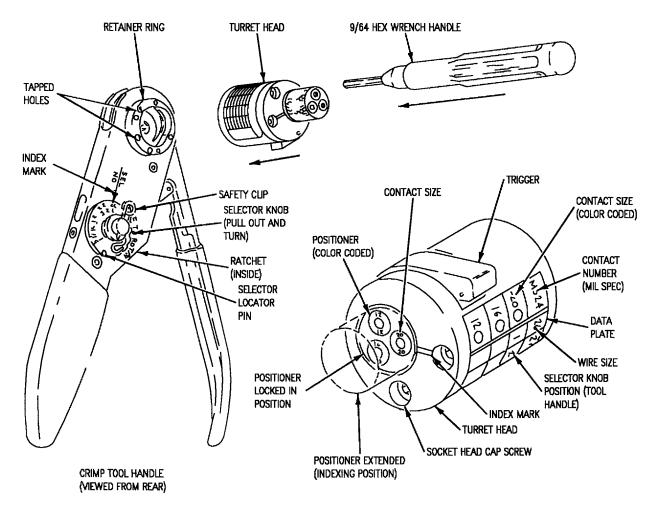
a. Select turret head or universal position head needed for applicable connector.

NOTE

Tool handle shall be fully open when inserting turret or positioner head and when changing selector positions.

14. REMOVAL AND INSTALLATION OF TURRET HEAD.

- a. Press trigger on turret head releasing positioner to extended (indexing) position. See figure 9.
- b. Seat turret head onto retainer ring on back of tool with screws lined up with tapped holes.
- c. Tighten socket head screws with a 9/64-inch allen wrench.
- d. To remove, loosen socket head screw until threads are disengaged from tapped holes, open handles completely and lift off crimp tool.



F/A-18-WRM-(405-1)01-SCAN

Figure 9. M22520/1-01 Crimp Tool Handle and Turret Head

15. ADJUSTING TURRET HEAD BEFORE CRIMPING.

- a. Press trigger on turret head releasing positioner to extended (indexing) position.
- b. Select positioner desired from color coded data plate on side of turret head assembly.
- c. Rotate positioners until color coded positioner is lined up with index mark.
- d. Press positioner into turret head until it snaps into locked position.

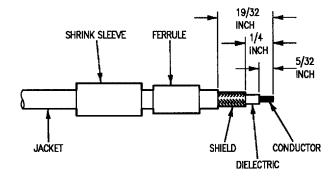
16. SETTING SELECTOR KNOB USING TURRET HEAD.

- a. Refer to data plate on turret head assembly. The correct selector number is listed below the wire size and opposite the contact size.
 - b. Remove the safety clip lock from selector knob.
- c. Raise selector knob and rotate to selector number found on data plate.
 - d. Replace safety clip.

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

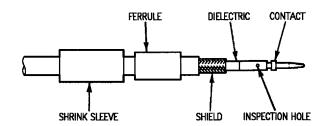
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-165 for cable with 11/32-inch between blades (see paragraph 5). Strip cable jacket 19/32-inch and shield 1/4-inch. Using sharp knife, remove 5/32-inch of dielectric.



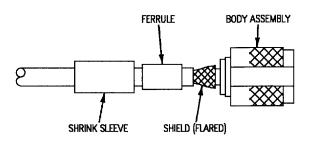
F/A-18-WRM-(310-1)01-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-12 (Blue) turret head and M22520/1-01 crimping tool handle, crimp contact using setting 5 (see paragraph 13).



F/A-18-WRM-(320-1)01-CATI

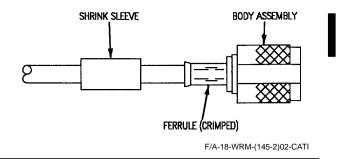
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(145-1)02-CATI

Figure 10. 31-3228-1001, 31-3228-1002, 31-3228-1004, 31-3228-1005 and 31-3228-1006 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-05 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 9).



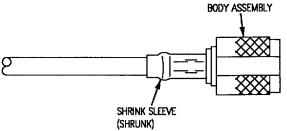
5. Slide shrink sleeve over ferule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.

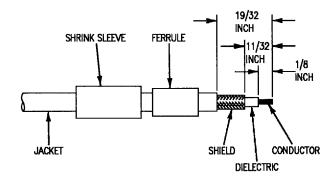


F/A-18-WRM-(145-3)02-CATI

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

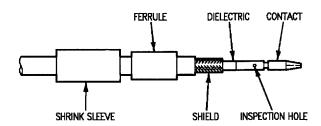
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-165 for cable with 11/32-inch between blades (see paragraph 5). Strip cable jacket 19/32-inch and shield 11/32-inch. Using sharp knife remove 1/8-inch of dielectric.



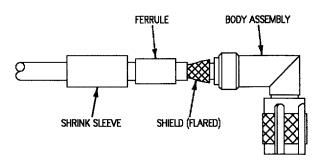
F/A-18-WRM-(310-3)02-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-12 (Green) turret head and M22520/1-01 crimping tool handle, crimp contact using setting 5 (see paragraph 13).



F/A-18-WRM-(320-2)01-CATI

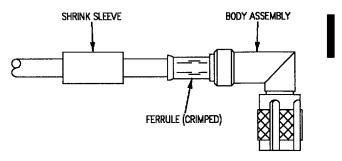
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(146-1)02-CATI

Figure 11. 31-3229-1001, 31-3229-1002 and 31-3229-1004 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-05 die set and M22520-5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 9).



F/A-18-WRM-(146-2)02-CATI

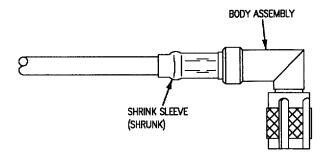
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.



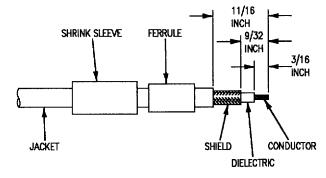
F/A-18-WRM-(146-3)02-CATI

Figure 11. 31-3229-1001, 31-3229-1002 and 31-3229-1004 Coaxial Connector Repair (Sheet 2)

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

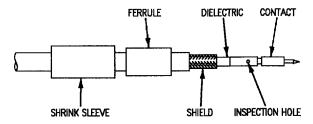
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-165 for cable with 11/32-inch between blades (see paragraph 5). Strip cable jacket 19/32-inch and shield 1/4-inch. Using sharp knife, remove 5/32-inch of dielectric.



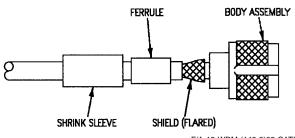
F/A-18-WRM-(148-1)02-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible-through inspection hole in contact. Using Y204 die set M22520/1-12 (Blue) turret head and M22520/1-01 crimping tool handle, crimp contact using setting 3 (see paragraph 13).



F/A-18-WRM-(148-2)02-CATI

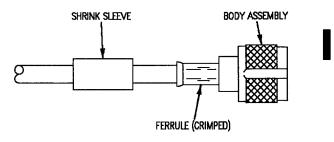
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(148-3)02-CATI

Figure 12. 31-4229-1001 and 31-4229-1002 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using Y204 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 9).



F/A-18-WRM-(148-4)02-CATI

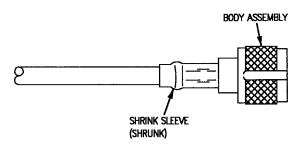
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.

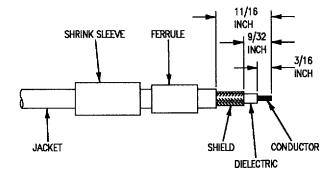


F/A-18-WRM-(148-5)02-CATI

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

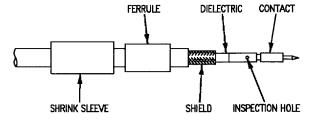
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-164 for cable with 13/32-inch between blades (see paragraph 5). Strip cable jacket 11/16-inch and shield 9/32-inch. Using sharp knife, remove 3/16-inch of dielectric.



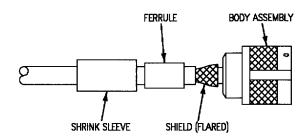
F/A-18-WRM-(148-1)02-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-13 (Green) turret heat and M22520/1-01 crimping tool handle, crimp contact using setting 7 (see paragraph 13).



F/A-18-WRM-(149-1)02-CATI

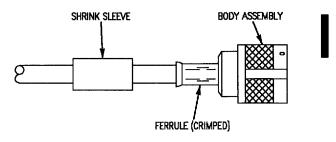
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(149-2)02-CATI

Figure 13. 82-3223-1, 82-3223-2, 82-3223-3 and 82-3223-4 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-25 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 9).



F/A-18-WRM-(149-3)02-CATI

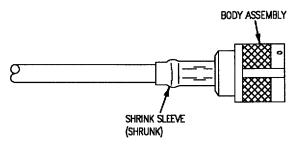
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.



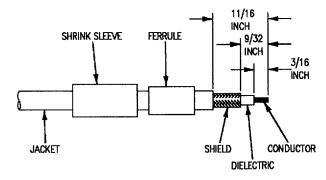
F/A-18-WRM-(149-4)02-CATI

Figure 13. 82-3223-1, 82-3223-2, 82-3223-3 and 82-3223-4 Coaxial Connector Repair (Sheet 2)

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

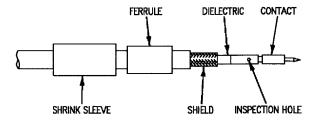
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-164 for cable with 13/32-inch between blades (see paragraph 5). Strip cable jacket 11/16-inch and shield 9/32-inch. Using sharp knife, remove 3/16-inch of dielectric.



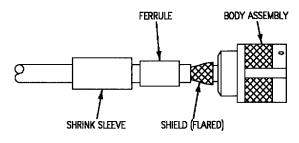
F/A-18-WRM-(148-1)02-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-13 (Green) turret head and M22520/1-01 crimping tool handle, crimp contact using setting 7 (see paragraph 13).



F/A-18-WRM-(149-1)02-CATI

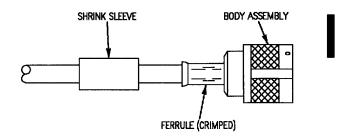
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(149-2)02-CATI

Figure 14. 82-5627-1 and 82-5627-2 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-05 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 9).



F/A-18-WRM-(149-3)02-CATI

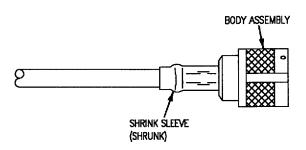
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.

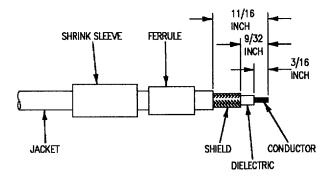


F/A-18-WRM-(149-4)02-CATI

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

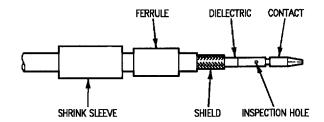
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-164 for cable with 13/32-inch between blades (see paragraph 5). Strip cable jacket 11/16-inch and shield 9/32-inch. Using sharp knife, remove 3/16-inch of dielectric.



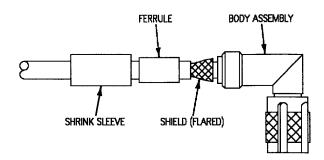
F/A-18-WRM-(148-1)02-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-13 (Blue) turret head and M22520/1-01 crimping tool handle, crimp contact using setting 8 (see paragraph 13).



F/A-18-WRM-(320-2)01-CATI

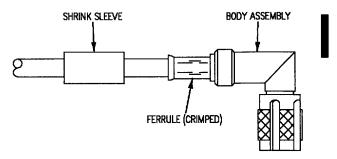
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(146-1)02-CATI

Figure 15. 82-5676-1 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-25 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 9).



F/A-18-WRM-(146-2)02-CATI

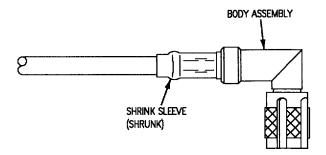
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.



F/A-18-WRM-(146-3)02-CATI

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA AN3116-2 AN TYPE COAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No.
AN3116-2 Connector, Figure 8	6
Description	2
Filling Solder Cup, Figure 5	4
Jacket Removal, Figure 2	3
Materials Required	2
Procedure	2
R-720A Wire Stripper Use, Figure 1	2
Reference Designation to Figure Number Index	2
Sealing Compound Cure Time, Table 1	9
Soldering	3
Soldering Contact to Center Conductor	4
Tinning Center Conductor	3
Soldering Contact to Center Conductor, Figure 6	4
Support Equipment Required	2
Tinning Center Conductor, Figure 3	3
Unacceptable Conditions After Soldering Contact, Figure 7	5
Unacceptable Conditions After Tinning, Figure 4	4
Wire Stringer R-720A Use	2

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

Reference Designation	Figure No.	
33P-J009	8	
1 33P-L019	8	

LEGEND



Specification

1. DESCRIPTION.

2. AN3116-2 is a non-RF coax-type connector used in the cockpit lighting system. It has a single soldered inner contact and the shield is retained by an interference fit between the connector housing and the ferrule assembly. It is not repairable. The connector is made up of a connector housing, fiber washer, contact, fiber spacer, and ferrule assembly.

Support Equipment Required

Part Number or
Type Designation Nomenclature

3308AS100 Repair Set - Wire and Connector

Materials Required

or Part Number	Nomenclature
MIL-S-8516 TYPE 1, CLASS 3	Sealing Compound
MMS409	Cleaning Compound
EC1945BA	Adhesive Primer
SN60WRMAP2-0-040	Solder

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index in this WP for correct figure.

5. WIRE STRIPPER R-720A USE.

NOTE

For detailed explanation of wire strippers see WP010 00.

a. Place wire stripper on cable at desired stripping point. See Figure 1.

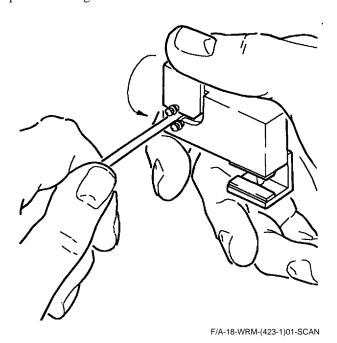
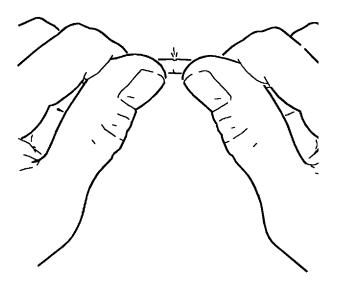


Figure 1. R-720A Wire Stripper Use

b. Rotate wire stripper one-half turn (180°).

- c. Remove stripper and flex cable at stripping point to complete jacket separation. See Figure 2.
- d. Remove jacket and use scissors to remove loose or raveled ends of jacket.



F/A-18-WRM-(424-1)01-SCAN

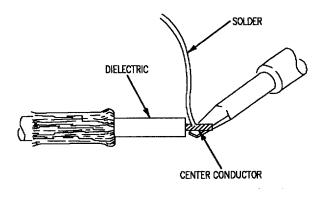
Figure 2. Jacket Removal

6. SOLDERING.

7. Soldering provides a mechanical and electrical bond between metallic components. To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

8. TINNING CENTER CONDUCTOR.

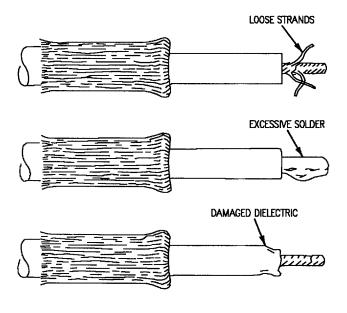
- a. Clean and tin soldering iron.
- b. Make sure center conductor wires are twisted together in the same direction as the lay of wire.
- c. Apply heat and solder to center conductor. Remove heat when solder flows into center conductor. Apply only enough solder to join strands together. Individual strands should be coated with solder yet their shape visible. See figure 3.



F/A-18-WRM-(139-1)02-SCAN

Figure 3. Tinning Center Conductor

- d. The below conditions are unacceptable: See figure 4.
 - (1) Individual wires not joined to center conductor.
 - (2) Excessive solder.
 - (3) Damaged dielectric.

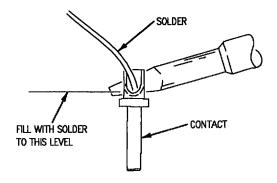


F/A-18-WRM-(412-3)02-SCAN

Figure 4. Unacceptable Conditions
After Tinning

9. SOLDERING CONTACT TO CENTER CONDUCTOR.

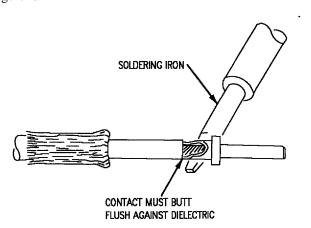
- a. Clean and tin soldering iron.
- b. Apply heat to contact solder cup and fill cup with solder. Avoid getting solder on outside of contact. See figure 5.



F/A-18-WRM-(574-2)02-SCAN

Figure 5. Filling Solder Cup

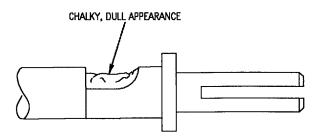
c. Position contact on center conductor and apply heat to solder cup. When solder melts, slide contact over center conductor. Remove heat as soon as solder flows between center conductor and contact. Hold cable and contact steady until solder hardens. See figure 6.

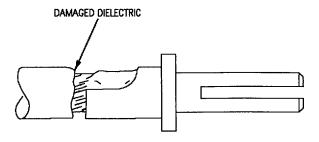


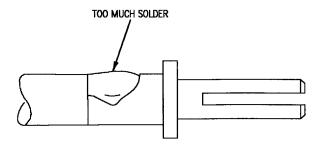
F/A-18-WRM-(413-3)02-SCAN

Figure 6. Soldering Contact to Center Conductor

- d. Inspect solder joint. Solder should be shiny and flow smoothly from center conductor to contact. The below conditions are unacceptable. See figure 7.
 - (1) Chalky, dull appearance (cold solder joint).
 - (2) Damaged dielectric.
 - (3) Too much solder.





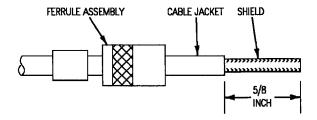


F/A-18-WRM-(412-4)02-SCAN

Figure 7. Unacceptable Conditions
After Soldering Contact

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

1. Slide ferrule assembly over cable jacket. Using R-720A wire stripper, remove 5/8-inch of cable jacket. See paragraph 5.



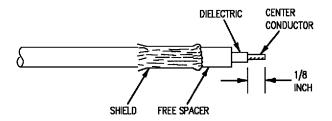
F/A-18-WRM-(144-1)02-CATI

2. Comb shield and fold back over cable jacket.



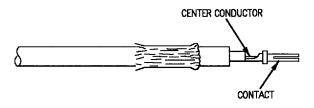
To prevent premature failure of connector, do not nick or scratch center conductor.

3. Using sharp knife, remove 1/8-inch of insulation from center conductor. Slide fiber spacer over insulation and butt against shield.



F/A-18-WRM-(144-2)02-CATI

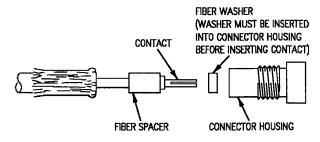
4. Using W60-3 soldering iron, tin center conductor. See paragraph 8. Solder contact to center conductor, making sure contact butts against insulation. See paragraph 9.



F/A-18-WRM-(144-3)02-CATI

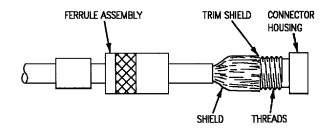
Figure 8. AN3116-2 Connector (Sheet 1)

5. Slide fiber spacer forward against contact. Insert fiber washer into connector housing.



F/A-18-WRM-(144-4)02-CATI

6. Slide connector housing fully onto contact. Fold shield over connector housing and trim at threads.



F/A-18-WRM-(144-5)02-CATI

7. Slide ferrule assembly onto connector housing and tighten handtight.

WARNING

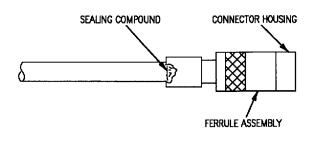
Cleaning compound and sealing compound is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection required. Avoid repeated/prolonged contact. Use only in well ventilated areas. Keep away from open flames or other sources of ignition.

Adhesive primer is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated area.

8. Clean ferrule assembly and cable with cleaning compound where sealing compound is to be applied.

WARNING

Apply adhesive primer to ferrule assembly and cable where sealing compound is to be applied. Allow primer to dry for 2 hours before applying sealing compound.



F/A-18-WRM-(144-6)02-CATI

Figure 8. AN3116-2 Connector (Sheet 3)

9. Seal ferrule assembly with sealing compound. See table 1 for curing time of sealing compound.

TABLE 1. SEALING COMPOUND CURE TIME

TEMPERATURE (°F)	CURING TIME (HOURS)
60	50
70	40
80	30
90	20
100	10
110	8
120 Max.	6

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA

M39012/XX-XXX AND 1119-079-A721 (MIL-C-39012) N TYPE COAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18A	.C-420-300
Utility Battery and Charger Unit or Utility Battery		WP019 00
Emergency Battery and Charger Unit or Emergency Battery		WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	11-F18AC-	WRM-000
Stripping Tools		WP010 00

Alphabetical Index

Subject	Page No.
Coaxial Cable Strippers 45-164 Adjustment and Use	3
Depth of Cut Adjustment	4
Distance Adjustment	3
Use	5
Crimping Operation, Figure 6	6
Crimp Tool M22520/5-01 Assembly and Use	5
Crimp Procedure	6
Die Installation	5
Die Removal	6
Crimp Tool Handle M22520/1-01 Assembly and Adjustments	8
Adjusting Turret Head Before Crimping	9
Removal and Installation of Turret Head	8
Setting Selector Knob Using Turret Head	9
Description	2
Die Installation, Figure 5	5
Distance Adjustment, Figure 1	3
Jacket Cut Adjustment, Figure 2	4
Lower Die Removal, Figure 8	7
Materials Required	2
M22520/1-01 Crimp Tool Handle and Turret Head, Figure 9	8
M39012/01-0501 Coaxial Connector Repair, Figure 10	10
M39012/05-0501 and M39012-05-0503 Coaxial Connector Repair, Figure 12	14
Operation, Figure 4	5
Procedure	2
Reference Designation to Figure Number Index	2
Shield Cut Adjustment, Figure 3	4
Support Equipment Required	2
Upper Die Removal, Figure 7	6

Alphabetical Index (Continued)

Subject	Page No.
1119-079-A721 and M39012-03-0501 Coaxial Connector	
Repair, Figure 11	12

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

Reference	
Designation	Figure No.
G	J
60J-A001E	11
2 60J-E007	11
60J-U012	11
60J-V015	11
60P-U013	12
60P-V016	12
2 69J-F007	11
1 69J-R007	11
69P-F008A	10
69P-F008B	12
71J-B004	11
71P-B001A	12
72P-B004	12
<u>76J-B</u> 018	11
2 76J-F019	11
1 76J-R019	11
1 77J-K004	11
1 77P-E004	12
<u>78J-B</u> 007	11
2 78J-E008	11
1 78J-P008	11

LEGEND

1	F/A-18B
2	E/A 10A

1. **DESCRIPTION.**

2. The N-type coaxial connector is a general purpose, threaded coupling connector used with medium size coaxial cable. These connectors meet the requirements of MIL-C-39012.

Support Equipment Required

Capport Equipment Required		
Part Number or Type Designation	Nomenclature	
HT-900	Heat Tool	
3308AS100	Repair Set - Wire and Connector	
1317AS100-1	Nitrogen Servicing Unit - NAN-3	
Material	s Required	
Specification or Part Number	Nomenclature	
MS23053/5-XXX-0	Shrink Sleeve	
3. PROCEDURE.		



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table within this work package for correct figure.

5. COAXIAL CABLE STRIPPERS 45-164 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

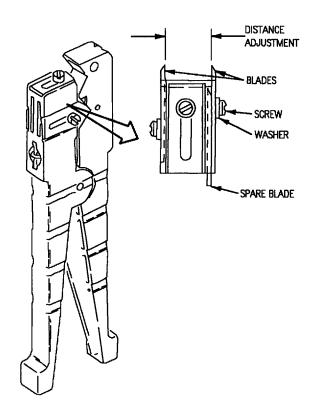
6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting two spare blades will change distance between blades 3/64 inch.

- c. Install screws and tighten finger tight.
- d. Adjust depth of cut.



F/A-18-WRM-(409-2)01-SCAN

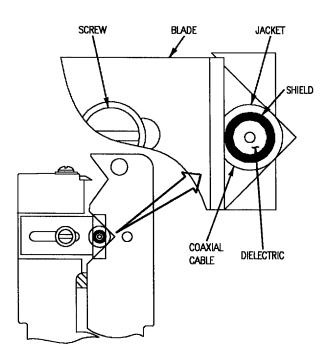
Figure 1. Distance Adjustment

7. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.



F/A-18-WRM-(409-3)01-CATI

Figure 2. Jacket Cut Adjustment

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

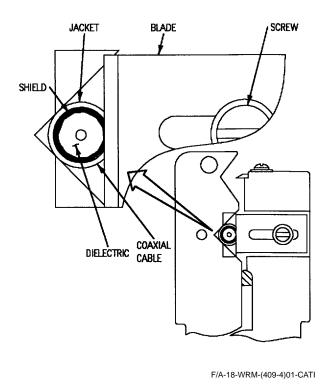


Figure 3. Shield Cut Adjustment

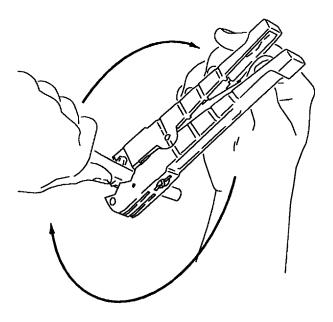
8. USE.

a. Position stripper on cable so that blades face down. See figure 4.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.



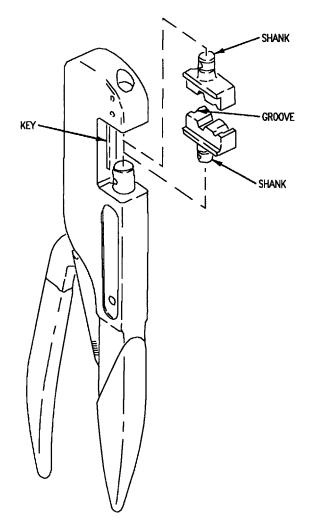
F/A-18-WRM-(409-1)01-SCAN

Figure 4. Operation

9. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

10. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 5.
- b. Close handle to make sure dies are seated and locked in place.

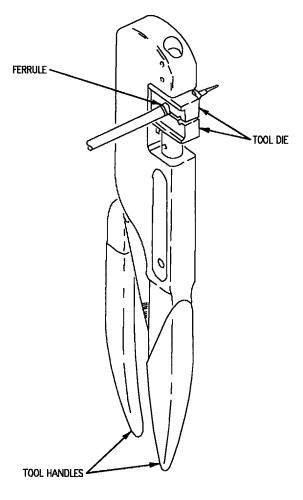


F/A-18-WRM-(410-2)01-SCAN

Figure 5. Die Installation

11. CRIMP PROCEDURE.

- a. Position crimping material in correct cavity of dies. See figure 6.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.



F/A-18-WRM-(410-1)01-SCAN

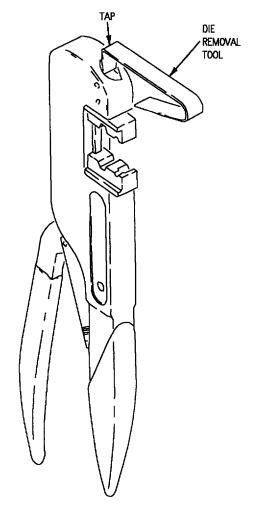
Figure 6. Crimping Operation

12. **DIE REMOVAL.**

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 7.



F/A-18-WRM-(410-3)01-SCAN

Figure 7. Upper Die Removal

b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.

- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 8.
- d. Pull handle open with a snap action. The die will be released from the lock spring and can be removed by hand.

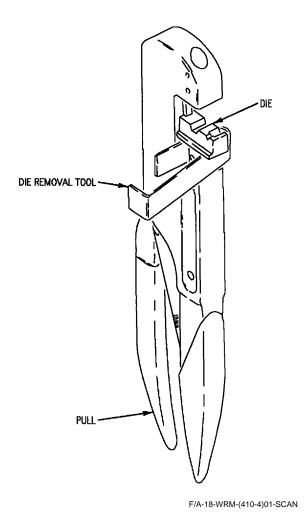


Figure 8. Lower Die Removal

13. CRIMP TOOL HANDLE M22520/1-01 ASSEMBLY AND ADJUSTMENTS.

NOTE

Make sure crimp tool is operating correctly by using M22520/3-1 inspection gage.

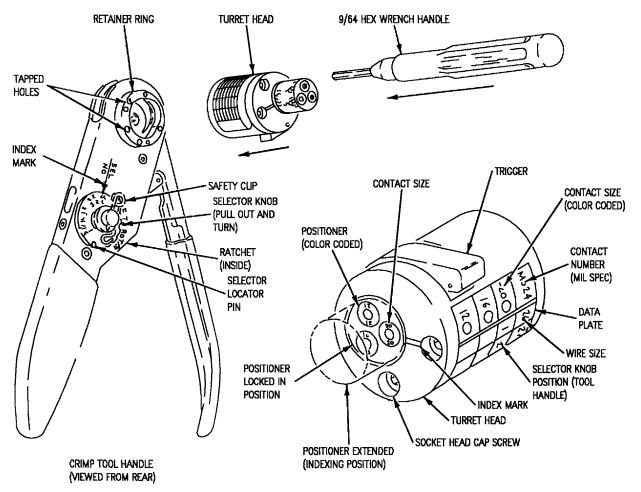
a. Select turret head or universal position head needed for applicable connector.

NOTE

Tool handle shall be fully open when inserting turret or positioner head and when changing selector positions.

14. REMOVAL AND INSTALLATION OF TURRET HEAD.

- a. Press trigger on turret head releasing positioner to extended (indexing) position. See figure 9.
- b. Seat turret head onto retainer ring on back of tool with screws lined up with tapped holes.
- c. Tighten socket head screws with a 9/64-inch allen wrench.
- d. To remove, loosen socket head screw until threads are disengaged from taplped holes, open handles completely and lift off crimp tool.



F/A-18-WRM-(405-1)01-SCAN

Figure 9. M22520/1-01 Crimp Tool Handle and Turret Head

17. ADJUSTING TURRET HEAD BEFORE CRIMPING.

- a. Press trigger on turret head releasing positioner to extended (indexing) position.
- b. Select positioner desired from color coded data page; on side of turret head assembly.
- c. Rotate positioners until color coded positioner is lined up with index mark.
- d. Press positioner into turret head until it snaps into locked position.

18. SETTING SELECTOR KNOB USING TURRET HEAD.

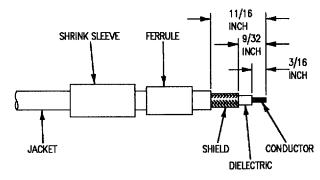
- a. Refer to data plate on turret head assembly. The correct selector number is listed below the wire size and opposite the contact size.
 - b. Remove the safety clip lock from selector knob.
- c. Raise selector knob and rotate to selector number found on the data plate.
 - d. Replace safety clip.

CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

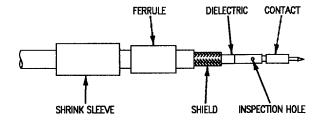
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

- 1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust
- cable stripper 45-165 for cable with 13/32-inch between blades (see paragraph 5). Strip cable jacket 11/16-inch and shield 9/32-inch. Using sharp knife, remove 3/16-inch of dielectric.



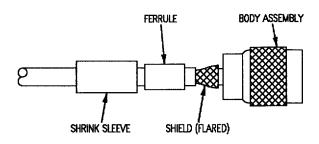
F/A-18-WRM-(148-1)02-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-13 (Green) turret head and M22520/1-01 crimping tool handle, crimp contact using setting 8 (see paragraph 13).



F/A-18-WRM-(148-2)02-CATI

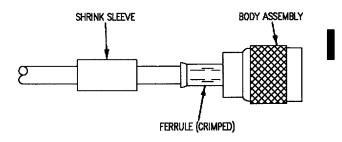
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(151-1)02-CATI

Figure 10. M39012/01-0501 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-25 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 9).



F/A-18-WRM-(151-2)02-CATI

5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion. Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.

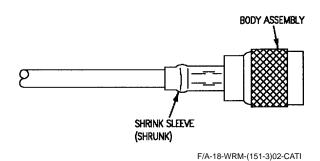


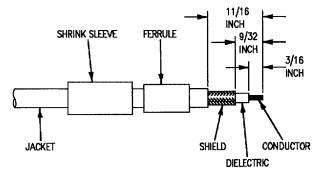
Figure 10. M39012/01-0501 Coaxial Connector Repair (Sheet 2)

CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

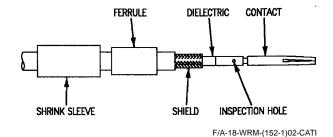
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

- 1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust
- cable stripper 45-165 for cable with 13/32-inch between blades (see paragraph 5). Strip cable jacket 11/16-inch and shield 9/32-inch. Using sharp knife, remove 3/16-inch of dielectric.

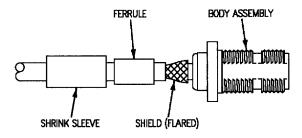


F/A-18-WRM-(148-1)02-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-14 (Green) turret head and M22520/1-01 crimping tool handle, crimp contact using setting 8 (see paragraph 13).



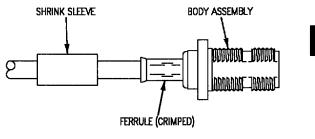
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(152-2)02-CATI

Figure 11. 1119-079-A721 and M39012/03-0501 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-25 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 9).



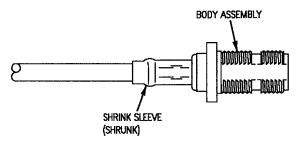
F/A-18-WRM-(152-3)02-CATI

5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion. Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.



F/A-18-WRM-(152-4)02-CATI

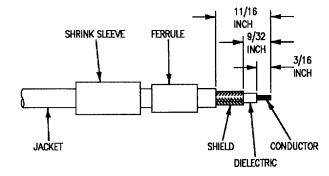
Figure 11. 1119-079-A721 and M39012/03-0501 Coaxial Connector Repair (Sheet 2)

CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

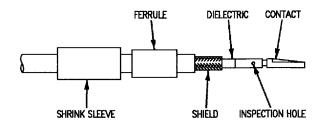
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-164 for cable with 13/32-inch between blades (see paragraph 5). Strip cable jacket 11/16-inch and shield 9/32-inch. Using sharp knife, remove 3/16-inch of dielectric.



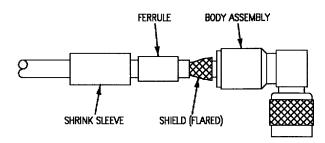
F/A-18-WRM-(148-1)02-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-13 (Blue) turret heat and M22520/1-01 crimp tool handle, crimp contact using setting 8 (see paragraph 13).



F/A-18-WRM-(153-1)02-CATI

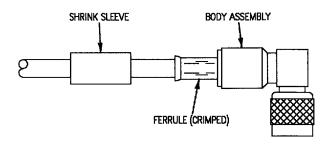
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(153-2)02-CATI

Figure 12. M39012/05-0501 and M39012/05-0505 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-25 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 9).



F/A-18-WRM-(153-3)02-CATI

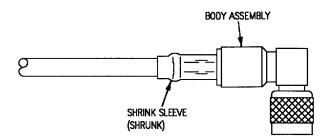
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.



F/A-18-WRM-(153-4)02-CATI

Figure 12. M39012/05-0501 and M39012/05-0503 Coaxial Connector Repair (Sheet 2)

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA

19900 (MIL-C-3643) N TYPE COAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No.
Coaxial Cable Strippers 45-164 Adjustment and Use	2
Depth of Cut Adjustment	2
Use	3
Description	2
Filling Solder Cup, Figure 5	4
Jacket Cut Adjustment, Figure 1	2
Materials Required	2
Operation, Figure 2	3
Procedure	2
Reference Designation to Figure Number Index	2
Soldering	3
Soldering Contact to Center Conductor	4
Tinning Center Conductor	3
Soldering Contact to Center Conductor, Figure 6	4
Support Equipment Required	2
Tinning Center Conductor, Figure 3	3
Unacceptable Conditions After Soldering Contact, Figure 7	5
Unacceptable Conditions After Tinning, Figure 4	4
19900 (MIL-C-3643) Coax Connector Repair Figure 8	6

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

No.

Reference Designation	Figure
69P-F001E	8
69P-F001F	8

1. DESCRIPTION.

2. The 10567 and 19900 coaxial connectors are single conductor, soldered pin plugs (RG 393 cable) and have a temperature range of -85° to $+257^{\circ}$ F.

Support Equipment Required

Part Number or Type Designation	Nomenclature
3308AS100	Repair Set - Wire
	and Connector
-	Torque Wrench,
	0 to 75 Inch-pounds

Materials Required

Solder

Specification	
or Part Number	Nomenclature

SN60WRMAP2-0-040 3. **PROCEDURE.**



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table in this WP for correct figure.

5. COAXIAL CABLE STRIPPERS 45-164 ADJUSTMENT AND USE.

NOTE

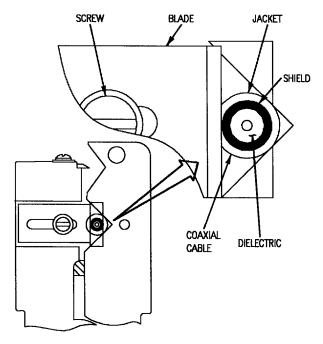
For detailed operation of coaxial wire strippers see WP010 00.

6. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 1.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.



F/A-18-WRM-(409-3)01-CATI

Figure 1. Jacket Cut Adjustment

- c. Adjust other blade so blade does not touch cable.
- d. If necessary, repeat steps 6a through 6c until blade cuts through jacket without damaging shield.

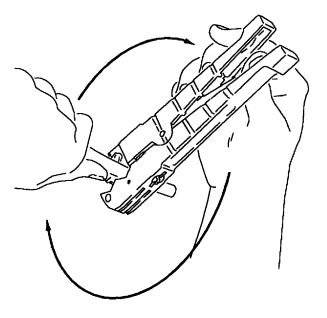
7. USE.

a. Position stripper on cable so that blades face down. See figure 2.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket.



F/A-18-WRM-(409-1)01-SCAN

Figure 2. Operation

8. SOLDERING.

9. Soldering provides a mechanical and electrical bond between metallic components. To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

10. TINNING CENTER CONDUCTOR.

- a. Clean and tin soldering iron.
- b. Make sure center conductor wires are twisted together in the same direction as the lay of wire.
- c. Apply heat and solder to center conductor. Remove heat when solder flows into center conductor. Apply only enough solder to join wires together. Individual wires should be coated with solder yet their shape visible. See figure 3.

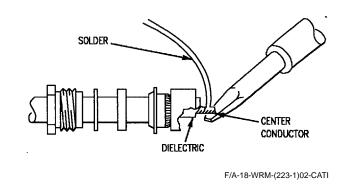
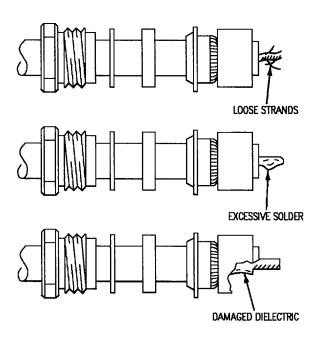


Figure 3. Tinning Center Conductor

- d. The below conditions are unacceptable: See figure 4.
 - (1) Individual wires not joined to center conductor.
 - (2) Excessive solder.
 - (3) Damaged dielectric.

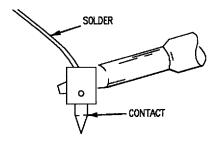


F/A-18-WRM-(223-2)02-CATI

Figure 4. Unacceptable Conditions
After Tinning

11. SOLDERING CONTACT TO CENTER CONDUCTOR.

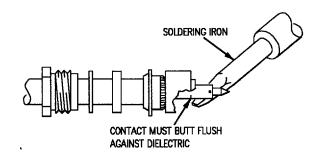
- a. Clean and tin soldering iron.
- b. Apply heat to contact solder cup and fill cup half full with solder. Avoid getting solder on outside of contact. See figure 5.



F/A-18-WRM-(223-3)02-CATI

Figure 5. Filling Solder Cup

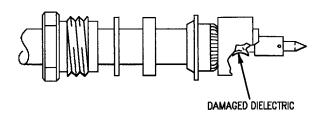
c. Position contact on center conductor and apply heat to solder cup. When solder melts, slide contact over center conductor. Remove heat as soon as solder flows between center conductor and contact. Hold cable and contact steady until solder hardens. See figure 6.

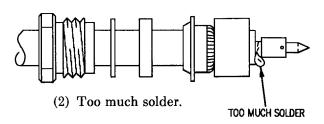


F/A-18-WRM-(223-4)02-CATI

Figure 6. Soldering Contact to Center Conductor

- d. Inspect solder joint. Solder should be shiny and flow smoothly from center conductor to contact. The below conditions are unacceptable. See figure 7.
 - (1) Damaged dielectric.





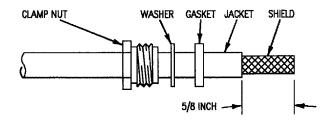
F/A-18-WRM-(223-5)02-CATI

Figure 7. Unacceptable Conditions
After Soldering Contact

CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- 1. Using 45-123 wire cutters, cut end of cable square. Slide clamp nut, washer, and gasket over cable. Grooved end of gasket must face end of cable. Using
- coaxial stripper 45-164 adjusted for cable, remove 5/8-inch of jacket. See paragraph 5.



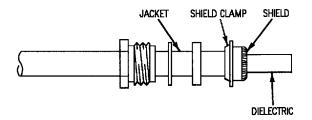
F/A-18-WRM-(192-1)02-CATI

2. Slide shield clamp, with tapered end towards gasket, over shield and against jacket.

NOTE

Shield stands must be smoothly and evenly distributed around fact of shield clamp.

3. Comb and flare out shield. Fold Shield over shield clamp and trim even with face of shield clamp.

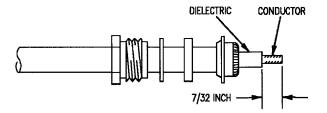


F/A-18-WRM-(192-2)02-CATI

CAUTION

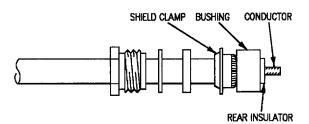
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

4. Using sharp knife, remove 7/32-inch of dielectric.



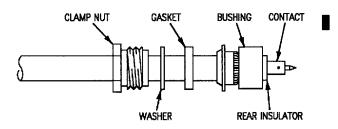
F/A-18-WRM-(192-3)02-CATI

5. Slide bushing and rear insulator on cable.



F/A-18-WRM-(192-4)02-CATI

6. Using W60-3 soldering iron, tin center conductor. See paragraph 10. Using W60-3 soldering iron, solder contact to center conductor. See paragraph 11.



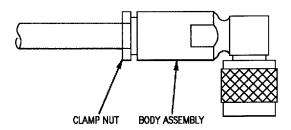
F/A-18-WRM-(192-5)02-CATI

7. Slide body assembly over contact until it stops. Slide gasket, washer, and clamp nut into body assembly. Make sure groove in gasket goes over beveled edge of shield clamp.



Do not allow body assembly to rotate on cable while tightening clamp nut.

8. While supporting body assembly, torque clamp nut to 40 inch-pounds minimum.



F/A-18-WRM-(192-6)02-CATI

Figure 8. 19900 (MIL-C-3643) Coax Connector Repair (Sheet 3)

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA

E-7984 AND 2115-1-5 (MIL-C-39012) BNC TYPE COAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No.
Coaxial Cable Strippers 45-165 Adjustment and Use	2
Depth of Cut Adjustment	3
Distance Adjustment	3
Use	4
Contact Crimping, Figure 10	9
Crimping Operation, Figure 6	6
Crimp Tool Handle M22520/1-01 Assembly, Adjustments, and Use	8
Adjusting Turret Head	9
Contact Crimping	9
Removal and Installation of Turret Head	8
Setting Selector Knob	9
Crimp Tool M22520/5-01 Assembly and Use	5
Crimp Procedure	6
Die Installation	5
Die Removal	6
Description	2
Die Installation, Figure 5	5
Distance Adjustment, Figure 1	3
E-7984 Coaxial Connector Repair, Figure 11	10
Jacket Cut Adjustment, Figure 2	3
Lower Die Removal, Figure 8	7
Materials Required	2
M22520/1-01 Crimp Tool Handle and Turret Head, Figure 9	8
Operation, Figure 4	4
Procedure	2
Reference Designation to Figure Number Index	2
Shield Cut Adjustment, Figure 3	4
Support Equipment Required	2
Upper Die Removal, Figure 7	6

Alphabetical Index (Continued)

Subject	Page No.
2115-1-5 Coaxial Connector Repair, Figure 12	12

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

Reference Designation	Figure No.
61J-W106	9
61P-Y106	10

1. **DESCRIPTION.**

2. The E-7984 and 2115-1-5 connectors are mating BNC type radio frequency coaxial connectors. They have a temperature range of -85° to +329°F. They are not repairable.

Support Equipment Required

Type Designation	Nomenclature
HT-900	Heat Tool
3308AS100	Repair Set - Wire and
	Connector
1317AS100-1	Nitrogen Servicing
	Unit - NAN-3

Materials Required

Specification or Part Number	Nomenclature
MS23053/5-XXX-0	Shrink Sleeve

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table within this WP for correct figure.

5. COAXIAL CABLE STRIPPERS 45-165 ADJUSTMENT AND USE

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

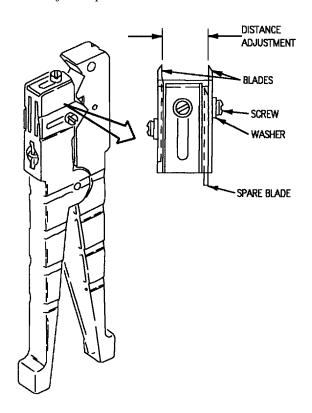
6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting two spare blades will change distance between blades 3/64-inch.

- c. Install screws and tighten handtight.
- d. Adjust depth of cut.



F/A-18-WRM-(409-2)01-SCAN

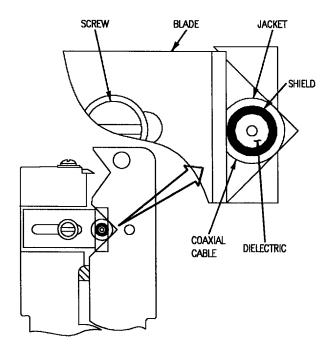
Figure 1. Distance Adjustment

7. DEPTH OF CUT ADJUSTMENT

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.



F/A-18-WRM-(409-3)01-CATI

Figure 2. Jacket Cut Adjustment

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

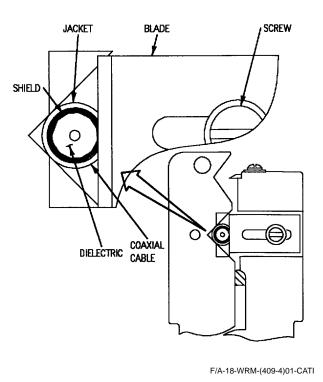


Figure 3. Shield Cut Adjustment

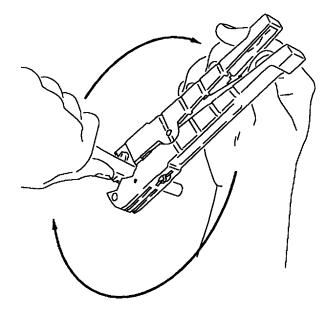
8. USE.

a. Position stripper on cable so that blades face down. See figure 4.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle blade side of stripper. Six to eight rotations will necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.



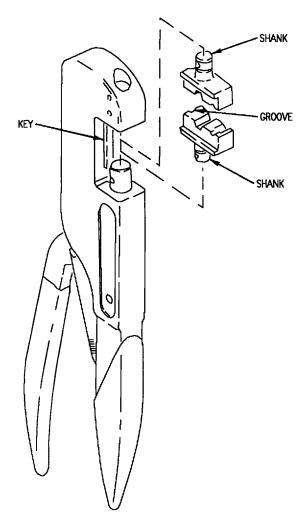
F/A-18-WRM-(409-1)01-SCAN

Figure 4. Operation

9. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

10. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 5.
- b. Close handle to make sure dies are correctly seated and locked in place.



F/A-18-WRM-(410-2)01-SCAN

Figure 5. Die Installation

11. CRIMP PROCEDURE.

- a. Position crimping material in correct cavity of dies. See figure 6.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

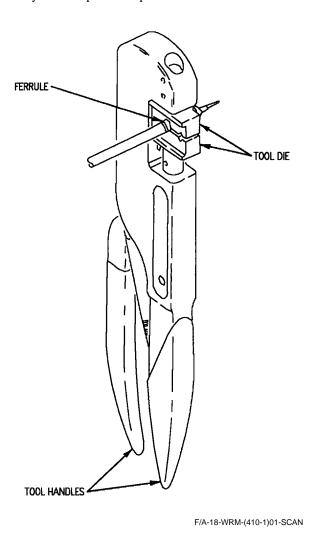


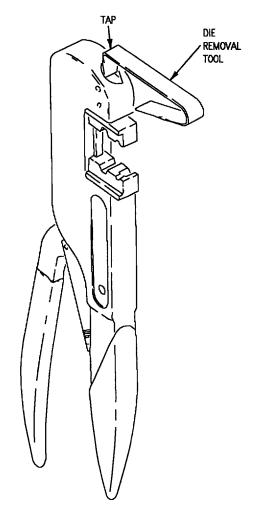
Figure 6. Crimping Operation

12. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

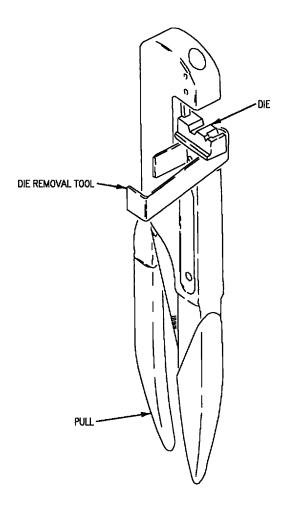
a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 7.



F/A-18-WRM-(410-3)01-SCAN

Figure 7. Upper Die Removal

- b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.
- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 8.



F/A-18-WRM-(410-4)01-SCAN

Figure 8. Lower Die Removal

d. Pull handle open with a snap action. The die will be released from the lock spring and can be removed by hand.

13. CRIMP TOOL HANDLE M22520/1-01 ASSEMBLY, ADJUSTMENTS, AND USE.

NOTE

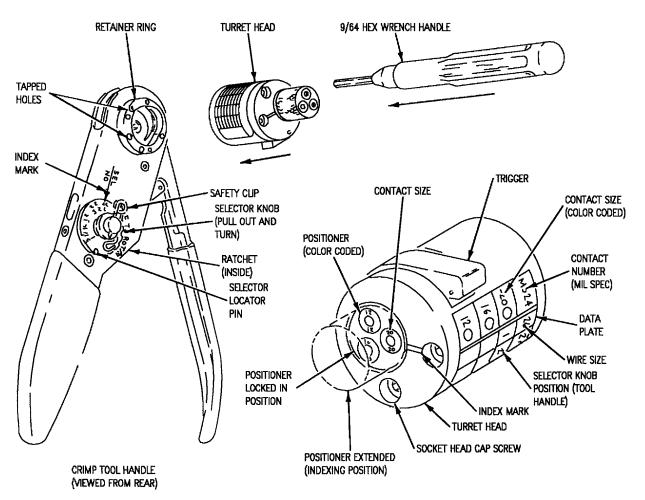
Make sure crimp tool is operating correctly by using M22520/3-1 inspection gage.

14. REMOVAL AND INSTALLATION OF TURRET HEAD.

NOTE

Crimp tool handle shall be fully open when inserting turret of positioner head and when changing selector position.

- a. Press trigger of turret head releasing positioner to extended indexing position. See figure 9.
- b. Seat turret head onto retaining ring on back of tool with socket head cap screws lined up with tapped holes.
- c. Tighten socket head screws with a 9/64-inch hex wrench.
- d. To remove, loosen socket head screw until threads are disengaged from tapped holes and lift off crimp tool.



F/A-18-WRM-(405-1)01-SCAN

Figure 9. M22520/1-01 Crimp Tool Handle and Turret Head

15. ADJUSTING TURRET HEAD.

- a. Press trigger on turret head, releasing positioner to extended (indexing) position.
- b. Rotate positioners until color coded positioner is lined up with index mark.
- c. Press positioner into turret head until it snaps into locked position.

16. SETTING SELECTOR KNOB.

- a. Remove the safety clip lock from selector knob.
- b. Raise selector knob and rotate to selector number found on data plate.
 - c. Replace safety clip.

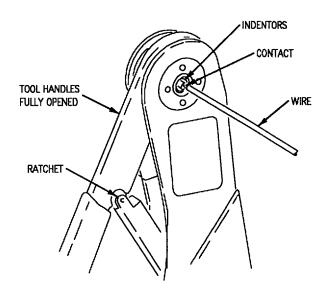
17. CONTACT CRIMPING

a. Insert contact and coax into crimp tool indentors on front of tool until contact bottoms in positioner/turret. (See figure 10, detail A).

NOTE

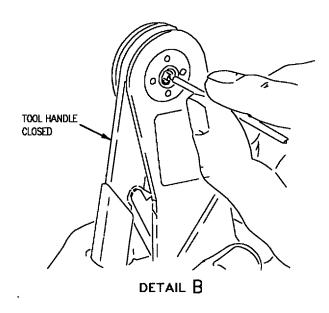
Crimp tool will not release until crimping cycle is completed.

- b. Hold coax in place and squeeze tool handles together smoothly until ratchet releases and tool opens. (See figure 10, detail B).
- c. Remove crimped contact from tool and inspect crimp.



CRIMP TOOL HANDLE (MEWED FROM FRONT)

DETAIL A



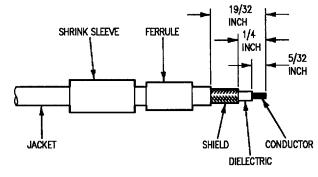
F/A-18-WRM-(407-1)01-SCAN

Figure 10. Contact Crimping

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24 vdc battery voltage exists in some wiring.

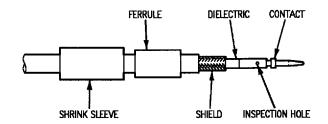
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

- 1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust
- cable stripper 45-165 for cable with 11/32-inch between blades (see paragraph 5). Strip cable jacket 19/32-inch and shield 1/4-inch. Using sharp knife, remove 5/32-inch of dielectric.



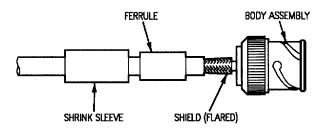
F/A-18-WRM-(310-1)01-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-12 (Red) turret head and M22520/1-01 crimping tool handle. Crimp contact using setting 5 (see paragraph 13).



F/A-18-WRM-(320-1)01-CATI

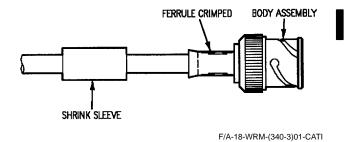
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(330-3)01-CATI

Figure 11. E-7984 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M2252-/1-05 die set and M22520/1-01 crimping tool frame, crimp ferrule in A cavity of die set (see paragraph 9).

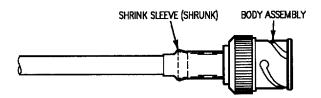


5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion. Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.

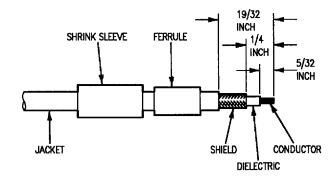


F/A-18-WRM-(350-3)01-CATI

Figure 11. E-7984 Coaxial Connector Repair (Sheet 2)

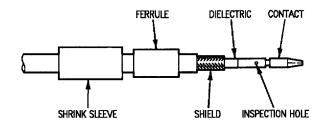
To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off 24vdc battery voltage exists in some wiring. To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

- 1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-165 for cable with 11/32-inch between blodge (see page 2016). Strip public index 10/
- cable stripper 45-165 for cable with 11/32-inch between blades (see paragraph 5). Strip cable jacket 19/32-inch and shield 1/4-inch. Using sharp knife, remove 5/32-inch of dielectric (see paragraph 9).



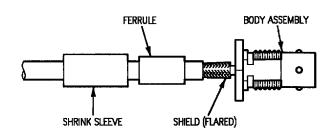
F/A-18-WRM-(310-1)01-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-12 (Blue) turret head and M22520/1-01 crimping tool handle, crimp contact using setting 5 (see paragraph 13).



F/A-18-WRM-(320-2)01-CATI

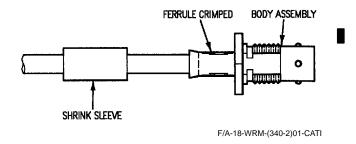
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(330-2)01-CATI

Figure 12. 2115-1-5 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-05 die set M22520/5-01 crimping tool frame, crimp ferrule in A cavity of die set (see paragraph 9).

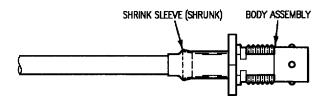


5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion. Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.



F/A-18-WRM-(350-2)01-CATI

Figure 12. 2115-1-5 Coaxial Connector Repair (Sheet 2)

Change 1 - 1 June 1995

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

M39012-XX-XXXX (MIL-C-39012) BNC TYPE COAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No.
Coaxial Cable Strippers 45-165 Adjustment and Use	3
Depth Adjustment	4
Distance Adjustment	3
Use	5
Contact Crimping, Figure 10	9
Crimp Tool Handle M22520/1-01 Assembly, Adjustments, and Use	8
Adjusting Turret Head	9
Contact Crimping	9
Removal and Installation of Turret Head	8
Setting Selector Knob	9
Crimp Tool M22520/5-01 Assembly and Use	5
Crimp Procedure	6
Die Installation	5
Die Removal	6
Crimping Operation, Figure 6	6
Description	2
Die Installation, Figure 5	5
Distance Adjustment, Figure 1	3
Jacket Cut Adjustment, Figure 2	4
KC-39-134-M07 Coaxial Connector Repair, Figure 12	12
Lower Die Removal, Figure 8	7
Materials Required	2
M22520/1-01 Crimp Tool Handle and Turret Head, Figure 9	8
M39012/16-0503 Coaxial Connector Repair, Figure 11	10
M39012/19-0503 Coaxial Connector Repair, Figure 14	16
M39012/20-0503 Coaxial Connector Repair, Figure 13	14
Operation, Figure 4	5
Procedure	3
Reference Designation to Figure Number Index	2

A1-F18AC-WRM-000 Change 1

Alphabetical Index (Continued)

Subject	Page No
Shield Cut Adjustment, Figure 3	4
Support Equipment Required	2
Upper Die Removal, Figure 7	6

Record of Applicable Technical Directives

None

Reference Designation to Figure **Support Equipment Required Number Index Part Number or Type Designation Nomenclature** Reference Designation Figure No. HT-900 Heat Tool 3308AS100 Repair Set - Wire and 61J-W102 14 Connector 61P-R162 13 1317AS100-1 Nitrogen Servicing 61P-W097B 11 Unit - NAN-3 61P-W097E 12 61P-W102 11 Materials Required 61P-Y102 11 61P-Z105B 11 S 61P-Z162 11 0 1. DESCRIPTION.

2. These are single conductor, crimp type coax connectors. There are four types of connectors, straight plug, straight in-line receptacle, panel mount receptacle, and right angle plug. These connectors have a temperature range of -85° to +392°F. They are not repairable.

wateri	iais Required
Specification or Part Number	Nomenclature
MS23053/5-XXX-0	Shrink Sleeve

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table within this WP for correct figure.

5. COAXIAL CABLE STRIPPERS 45-165 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

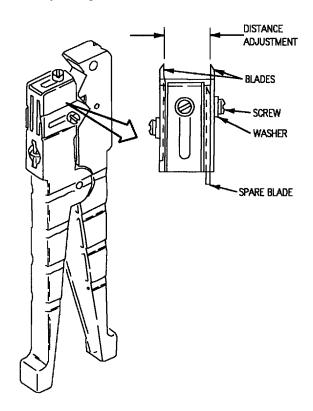
6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting two spare blades will change distance between blades 3/64-inch.

- c. Install screws and tighten finger tight.
- d. Adjust depth of cut.



F/A-18-WRM-(409-2)01-SCAN

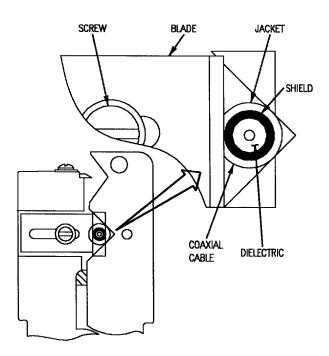
Figure 1. Distance Adjustment

7. DEPTH ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.



F/A-18-WRM-(409-3)01-CATI

Figure 2. Jacket Cut Adjustment

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

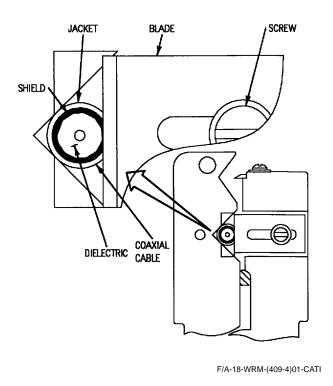


Figure 3. Shield Cut Adjustment

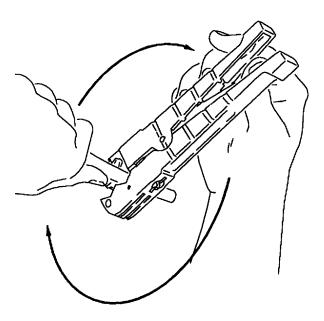
8. USE.

a. Position stripper on cable so that blades face down. See figure 4.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.



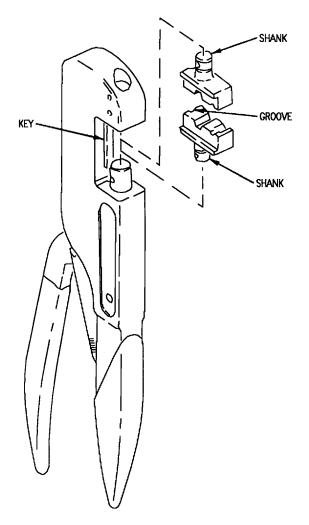
F/A-18-WRM-(409-1)01-SCAN

Figure 4. Operation

9. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

10. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 5.
- b. Close handle to make sure dies are seated and locked in place.



F/A-18-WRM-(410-2)01-SCAN

Figure 5. Die Installation

11. CRIMP PROCEDURE.

- a. Position crimping material in correct cavity of dies. See figure 6.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

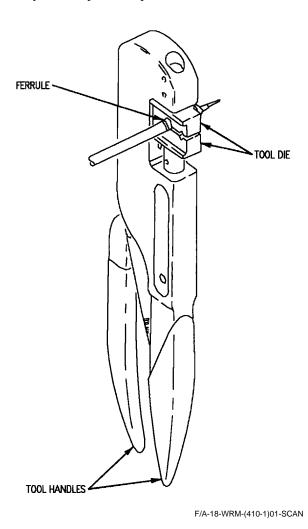


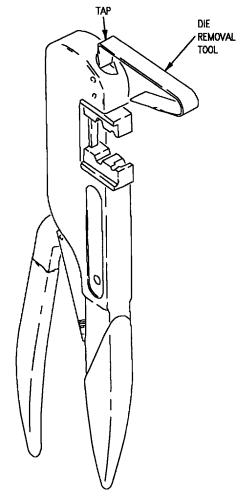
Figure 6. Crimping Operation

12. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

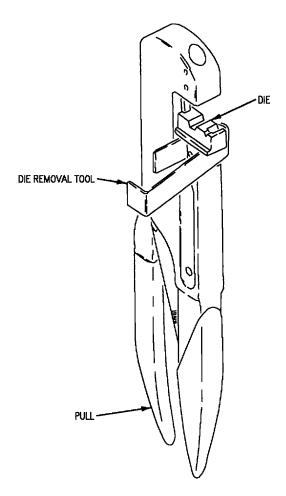
a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 7.



F/A-18-WRM-(410-3)01-SCAN

Figure 7. Upper Die Removal

- b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.
- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 8.



F/A-18-WRM-(410-4)01-SCAN

Figure 8. Lower Die Removal

d. Pull handle open with a snap action. The die will be released from the lock spring and can then be removed by hand.

13. CRIMP TOOL HANDLE M22520/1-01 ASSEMBLY, ADJUSTMENTS, AND USE.

NOTE

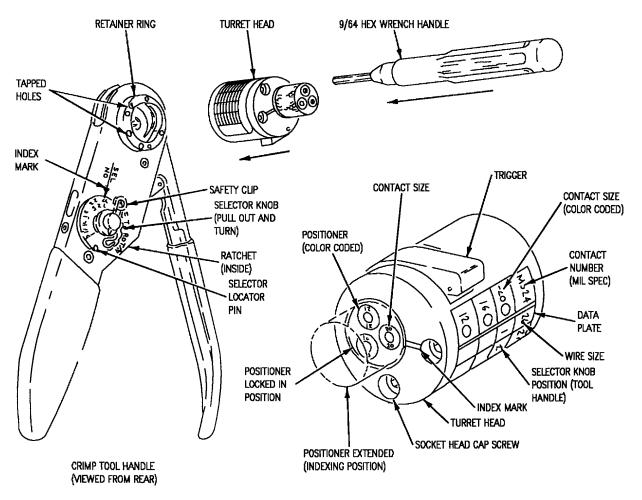
Make sure crimp tool is operating correctly by using M22520/3-1 inspection gage.

14. REMOVAL AND INSTALLATION OF TURRET HEAD.

NOTE

Crimp tool handle shall be fully open when inserting turret of positioner head and when changing selector position.

- a. Press trigger of turret head releasing positioner to extended (indexing) position. See figure 9.
- b. Seat turret head onto retaining ring on back of tool with socket head cap screws lined up with tapped holes.
- c. Tighten socket head screws with a 9/64-inch wrench.
- d. To remove, loosen socket head screw until threads are disengaged from tapped holes and lift off crimp tool.



F/A-18-WRM-(405-1)01-SCAN

Figure 9. M22520/1-01 Crimp Tool Handle and Turret Head.

18. ADJUSTING TURRET HEAD.

- a. Press trigger on turret head, releasing positioner to extended (indexing) position. Coded positioner is lined up with index mark.
- b. Press positioner into turret head until it snaps into locked position.

19. SETTING SELECTOR KNOB.

- a. Remove the safety clip lock from selector knob.
- b. Raise selector knob and rotate to selector number found on data plate.
 - c. Replace safety clip.

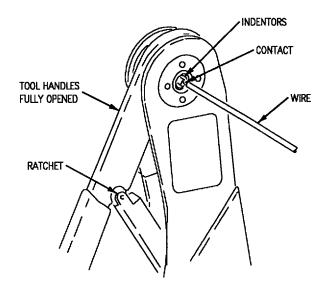
20. CONTACT CRIMPING.

a. Insert contact and coax into crimp tool indentors on front of tool until contact bottoms in positioner/turret. (See figure 10, detail A).

NOTE

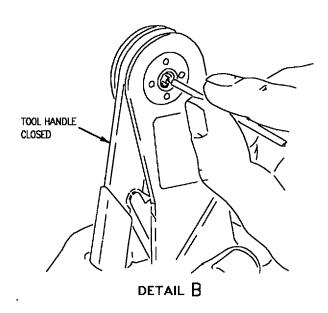
Crimp tool will not release until crimping cycle is completed.

- b. Hold coax in place and squeeze tool handles together smoothly until ratchet releases and tool opens (See figure 10, detail B).
- c. Remove crimped contact from tool and inspect crimp.



CRIMP TOOL HANDLE (VIEWED FROM FRONT)

DETAIL A



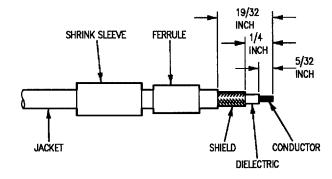
F/A-18-WRM-(407-1)01-SCAN

Figure 10. Contact Crimping

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

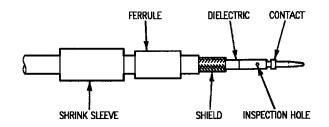
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-165 for cable with 11/32-inch between blades (see paragraph 5). Strip cable jacket 19/32-inch and shield 1/4-inch. Using sharp knife, remove 5/32-inch of dielectric.



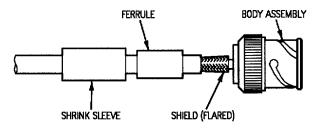
F/A-18-WRM-(310-1)01-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-12 (Blue) turret head and M22520/1-01 crimping tool handle, crimp contact setting 5 (see paragraph 13).



F/A-18-WRM-(320-1)01-CATI

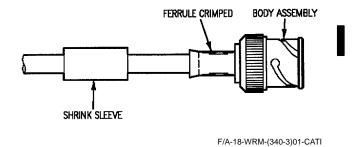
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. They body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(330-3)01-CATI

Figure 11. M39012/16-0503 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-05 die set and M22520/5-01 crimping tool frame, crimp ferrule in A cavity of die set (see paragraph 9).



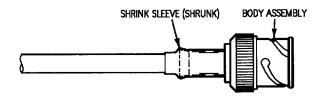
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.



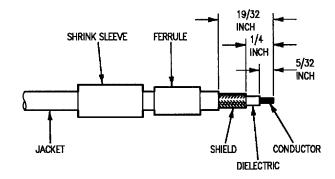
F/A-18-WRM-(350-3)01-CATI

Figure 11. M39012/16-0503 Coaxial Connector Repair (Sheet 2)

To prevent damage to aircraft wiring to equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

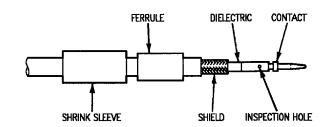
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-165 for cable with 11/32-inch between blades (see paragraph 5). Strip cable jacket 19/32-inch and shield 1/4-inch. Using sharp knife, remove 5/32-inch of dielectric.



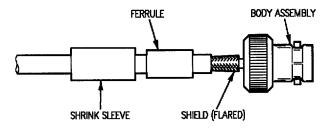
F/A-18-WRM-(310-1)01-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/5-09 die set and M22520/5-01 crimping tool frame, crimp contact in the B cavity of die set (see paragraph 9).



F/A-18-WRM-(320-1)01-CATI

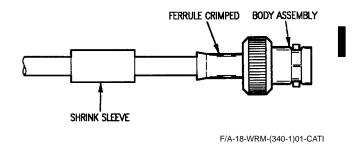
3. Flare shield. slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(330-1)01-CATI

Figure 12. KC-39-134-M07 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-05 die set and M22520/5-01 crimping tool frame, crimp ferrule in A cavity of die set (see paragraph 9).



5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.

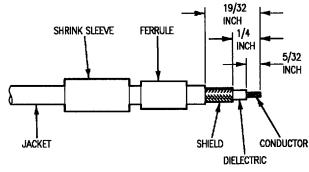


F/A-18-WRM-(350-1)01-CATI

To prevent damage to aircraft wiring to equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

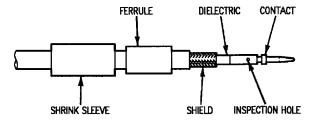
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-165 for cable with 11/32-inch between blades (see paragraph 5). Strip cable jacket 19/32-inch and shield 1/4-inch. Using sharp knife, remove 5/32-inch of dielectric.



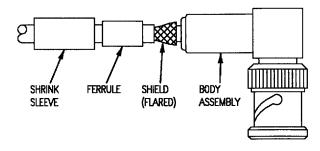
F/A-18-WRM-(310-1)01-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-12 (Green) turret head and M22520/1-01 crimping tool handle, crimp contact using setting 5 (see paragraph 13).



F/A-18-WRM-(320-2)01-CATI

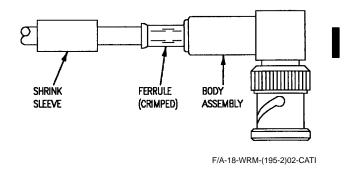
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(195-1)02-CATI

Figure 13. M39012/20-0503 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-05 die set M22520/5-01 crimping tool frame, crimp ferrule in A cavity of die set (see paragraph 9).



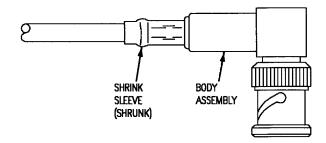
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.



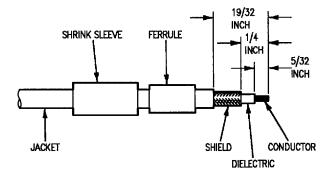
F/A-18-WRM-(195-3)02-CATI

Figure 13. M39012/20-0503 Coaxial Connector Repair (Sheet 2)

To prevent damage to aircraft wiring to equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

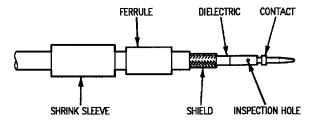
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-165 for cable with 11/32-inch between blades (see paragraph 5). Strip cable jacket 19/32-inch and shield 1/4-inch. Using sharp knife, remove 5/32-inch of dielectric.



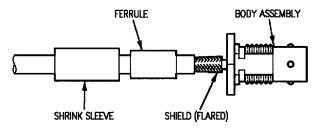
F/A-18-WRM-(310-1)01-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-12 (Red) turret and M22520/15-01 crimping tool handle, crimp contact using setting 5 (see paragraph 13).



F/A-18-WRM-(320-2)01-CATI

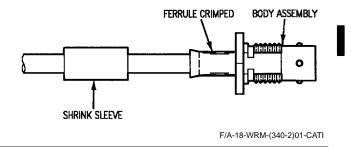
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(330-2)01-CATI

Figure 14. M39012/19-0503 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-05 die set and M22520/5-01 crimping tool frame, crimp ferule in A cavity of die set (see paragraph 9).



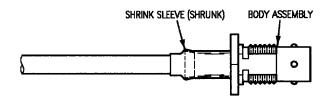
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.



F/A-18-WRM-(350-2)01-CATI

Figure 14. M39012-19-0503 Coaxial Connector Repair (Sheet 2)

1 October 1993

ORGANIZATIONAL MAINTENANCE

WIRING REPAIR WITH PARTS DATA

39100-10 (MIL-C-39012) BNC TYPE COAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No
Coaxial Cable Strippers 45-163 Adjustment and Use	2
Depth of Cut Adjustment	2
Use	3
Description	2
Materials Required	2
Operation, Figure 2	3
Procedure	2
Reference Designation to Figure Number Index	2
Soldering	3
Soldering Contact to Center Conductor	4
Tinning Center Conductor	3
Soldering Contact to Center Conductor, Figure 5	4
Stripping Adjustment, Figure 1	2
Support Equipment Required	2
Tinning Center Conductor, Figure 3	3
Unacceptable Conditions After Soldering Contact, Figure 6	4
Unacceptable Conditions After Tinning, Figure 4	4
39100-10 (MIL-C-39012) Coax Connector Repair, Figure 7	5

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

Reference Designation

Figure No.

69P-F001C

7

1. DESCRIPTION.

2. The 39100-10 coaxial connector is a single conductor, soldered pin plug and has a temperature range of -85° to $+257^{\circ}$ F.

Support Equipment Required

Type Designation Nomenclature

3308AS100 Repair Set - Wire and Connector

Torque Wrench, 0 to 50

Materials Required

Inch-Pounds

Specification

Part Number or

or Part Number Nomenclature

SN60WRMAP2-0-040 Solder

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table in this WP for correct figure.

5. COAXIAL CABLE STRIPPERS 45-163 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

6. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 1.
- b. Adjust blade so it cuts through jacket, shield, and dielectric without nicking center conductor and tighten screw.

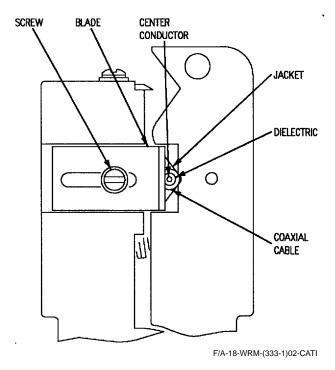


Figure 1. Stripping Adjustment

- c. Adjust other blade so blade does not touch cable.
- d. If necessary, repeat steps 6a through 6c until blade cuts through dielectric without damaging center conductor.

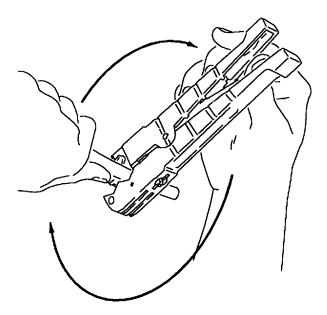
7. USE.

a. Position stripper on cable so that blades face down. See figure 2.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped material.



F/A-18-WRM-(409-1)01-SCAN

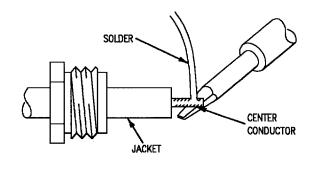
Figure 2. Operation

8. SOLDERING.

9. Soldering provides a mechanical and electrical bond between metallic components. To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

10. TINNING CENTER CONDUCTOR.

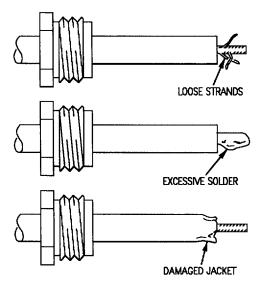
- a. Clean and tin soldering iron.
- b. Make sure center conductor wires are twisted together in the same direction as the lay of wire.
- c. Apply heat and solder to center conductor. Remove heat when solder flows into center conductor. Apply only enough solder to join wires together. Individual wires should be coated with solder yet their shape visible. See figure 3.



F/A-18-WRM-(334-1)02-CATI

Figure 3. Tinning Center Conductor

- d. The below conditions are unacceptable: See figure 4.
 - (1) Individual wires not joined to center conductor.
 - (2) Excessive solder.
 - (3) Damaged jacket.

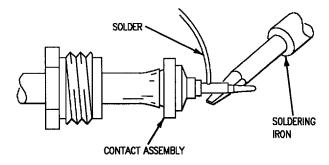


F/A-18-WRM-(334-2)02-CATI

Figure 4. Unacceptable Conditions
After Tinning

11. SOLDERING CONTACT TO CENTER CONDUCTOR.

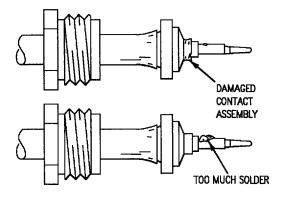
- a. Clean and tin soldering iron.
- b. Apply heat to contact and feed solder through inspection hole on contact. Remove heat as soon as solder flows between center conductor and contact. Hold cable and contact steady until solder hardens. See figure 5.



F/A-18-WRM-(334-3)02-CATI

Figure 5. Soldering Contact to Center Conductor

- c. Examine solder joint. Solder should be shiny and flow smoothly from center conductor to contact. The below conditions are unacceptable. See figure 6.
 - (1) Damaged contact assembly.
 - (2) Too much solder.

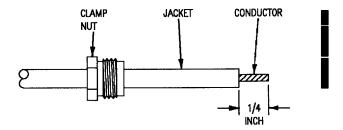


F/A-18-WRM-(334-4)02-CATI

Figure 6. Unacceptable Conditions
After Soldering Contact

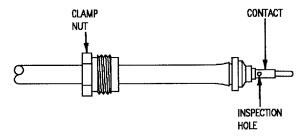
To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24 vdc battery voltage exists in some wiring.

1. Using 45-123 wire cutters, cut end of cable square. Slide clamp nut over cable. Using coaxial stripper 45-163, remove 1/4-inch of jacket, shield, and dielectric. See paragraph 5. Using W60-3 soldering iron, tin center conductor. See paragraph 10.



F/A-18-WRM-(277-1)02-CATI

2. Slide contact assembly over center conductor and between dielectric and shield until contact assembly bottoms against dielectric. Using W60-3 soldering iron, solder contact to center conductor. See paragraph 11.

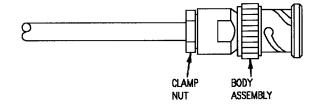


F/A-18-WRM-(277-2)02-CATI

CAUTION

To prevent damage to connector, do not allow connector body to turn while tightening clamp nut.

3. Insert contact assembly into body assembly. Slide clamp nut forward and engage threads. While supporting body assembly, tighten clamp nut. Torque nut 25 inch-pounds.



F/A-18-WRM-(277-3)02-CATI

Figure 7. 39100-10 (MIL-C-39012) Coax Connector Repair

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

M39012-XX-XXXX AND 31-4372-X (MIL-C-39012) TNC TYPE COAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No.
Coaxial Cable Strippers 45-164 and 45-165 Adjustment and Use	3
Depth of Cut Adjustment	4
Distance Adjustment	3
Use	5
Crimp Tool Handle M22520/1-01 Assembly and Adjustments	8
Adjusting Turret Head Before Crimping	9
Removal and Installation of Turret Head	8
Setting Selector Knob Using Turret Head	9
Crimp Tool M22520/5-01 Assembly and Use	5
Crimp Procedure	6
Die Installation	5
Die Removal	6
Crimping Operation, Figure 6	6
Description	2
Die Installation, Figure 5	5
Distance Adjustment, Figure 1	3
Jacket Cut Adjustment, Figure 2	4
Lower Die Removal, Figure 8	7
Materials Required	3
M22520/1-01 Crimp Tool Handle and Turret Head, Figure 9	8
M39012/26-0502 Coaxial Connector Repair, Figure 10	10
M39012/26-0503 Coaxial Connector Repair, Figure 11	12
M39012/28-0503 and M39012/28-0018 Coaxial Connector Repair, Figure 12	14
M39012/30-0503 Coaxial Connector Repair, Figure 13	16
Operation, Figure 4	5
Procedure	3
Reference Designation to Figure Number Index	2
Shield Cut Adjustment, Figure 3	4
Support Equipment Required	2

Alphabetical Index (Continued)

Subject	Page No.
Upper Die Removal, Figure 7	6
31-4372-1, 31-4372-2, 31-4372-3, and 31-4372-9 Coaxial Connector Repair, Figure 14	18

Record of Applicable Technical Directives

None

Reference Designation to Figure

Reference Designation to Figure

Number Index		Number Index	
Reference Designation	Figure No.	Reference Designation	Figure No.
60J-A001F	12	76P-F012A	13
61J-E013	11	77J-L004	12
61J-E025	12	77P-F003A	13
61J-P013	12	77P-F004	13
1 61P-E013	11	77P-L001A	13
2 61P-E013	10 (WP101 00)	78P-E001C	14
61P-E025	11		
61P-E047A	11	<u>LEGEND</u>	
61P-E047B	11	<u> </u>	
61P-E047C	13	1 F/A-18A	
61P-P028A	11	2 F/A-18B	
61P-P028B	13		
61P-P028C	11	1. DESCRIPTION.	
61P-U030A	11		
61P-U030B	13		
61P-U030C	13	2. These connectors are single conductor, crimp type coax plugs. There are two types of connectors, straight and right angle. These connectors have a temperature range of -85° to +392°F. They are not repairable.	
61P-V031A	11		
61P-V031B	13		
61P-V031C	13		
61P-W094A	11		
61P-W094B	11	Support Equipment Required	
61P-W094C	11	ouppoit Eq	aipmont Roquilou
71J-F006	12	Part Number or	
71P-F006	14	Type Designation	Nomenclature
72P-A002G	10	-	
74J-B007	12	HT-900	Heat Tool
74J-B008	12	3308AS100	Repair Set - Wire and
76J-F005	12	2500125100	Connector
76P-B011A	13	1317AS100-1	Nitrogen Servicing
76P-F001A	13	131/1101001	Unit - NAN-3
76P-F002A	13		
76P-F004B	14		
1 76P-F004E	11		
2 76P-F004E	14		
76P-F005	14		

Materials Required

Specification or Part Number

Nomenclature

MS23053/5-XXX-0

Shrink Sleeve

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table within this WP for correct figure.

5. COAXIAL CABLE STRIPPERS 45-164 AND 45-165 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

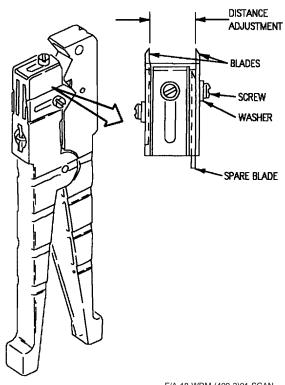
6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting two spare blades will change distance between blades 3/64-inch.

- c. Install screws and tighten finger tight.
- d. Adjust depth of cut.



F/A-18-WRM-(409-2)01-SCAN

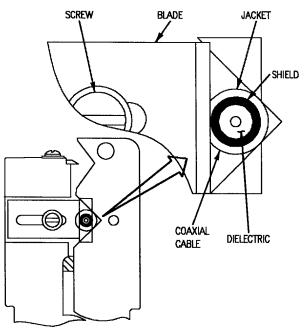
Figure 1. Distance Adjustment

7. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.



F/A-18-WRM-(409-3)01-CATI

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

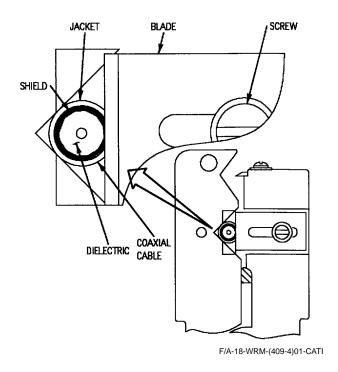


Figure 2. Jacket Cut Adjustment

Figure 3. Shield Cut Adjustment

8. USE.

a. Position stripper on cable so that blades face down. See figure 4.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.

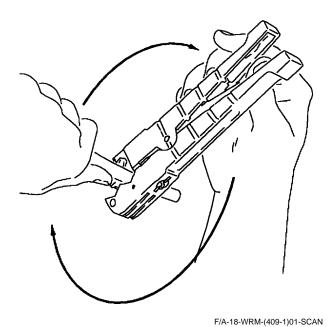


Figure 4. Operation

9. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

10. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 5.
- b. Close handle to make sure dies are seated and locked in place.

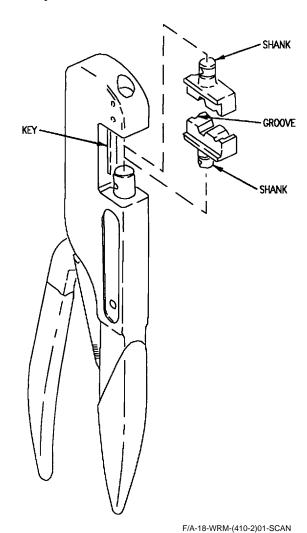


Figure 5. Die Installation

11. CRIMP PROCEDURE.

- a. Position crimping material in correct cavity of dies. See figure 6.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

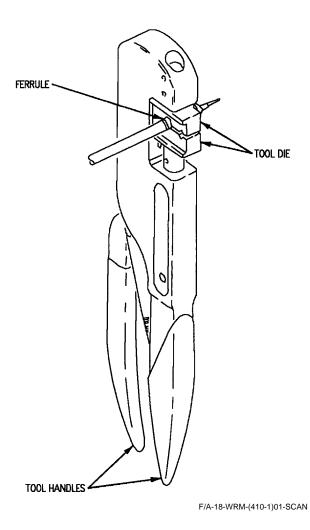


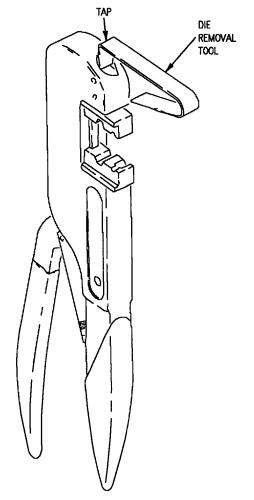
Figure 6. Crimping Operation

12. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 7.

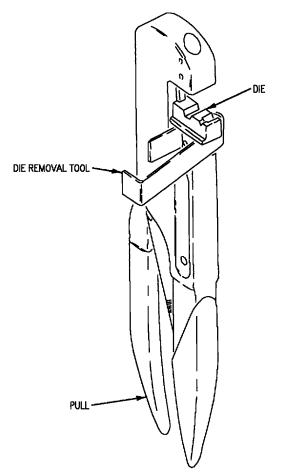


F/A-18-WRM-(410-3)01-SCAN

Figure 7. Upper Die Removal

b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.

c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 8.



F/A-18-WRM-(410-4)01-SCAN

Figure 8. Lower Die Removal

d. Pull handle open with a snap action. The die will be released from the lock spring and can then be removed by hand.

13. CRIMP TOOL HANDLE M22520/1-01 ASSEMBLY AND ADJUSTMENTS.

NOTE

Make sure crimp tool is operating correctly by using M22520/3-1 inspection gage.

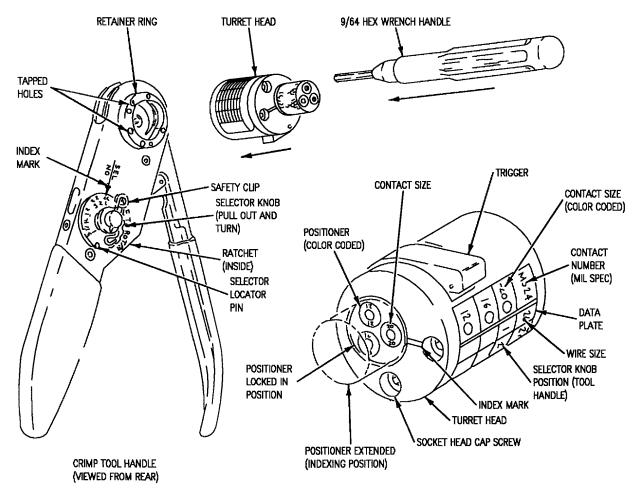
a. Select turret head or universal position head needed for applicable connector.

NOTE

Tool handle shall be fully open when inserting turret or positioner head and when changing selector positions.

14. REMOVAL AND INSTALLATION OF TURRET HEAD.

- a. Press trigger on turret head releasing positioner to extended (indexing) position. See figure 9.
- b. Seat turret head onto retainer ring on back of tool with screws lined up with tapped holes.
- c. Tighten socket head screws with a 9/64-inch allen wrench.
- d. To remove, loosen socket head screw until threads are disengaged from tapped holes, open handles completely and lift off crimp tool.



F/A-18-WRM-(405-1)01-SCAN

Figure 9. M22520/1-01 Crimp Tool Handle and Turret Head

15. ADJUSTING TURRET HEAD BEFORE CRIMPING.

- a. Press trigger on turret head releasing positioner to extended (indexing) position.
- b. Select positioner desired from color coded data plate on side of turret head assembly.
- c. Rotate positioners until color coded positioner is lined up with index mark.
- d. Press positioner into turret head until it snaps into locked position.

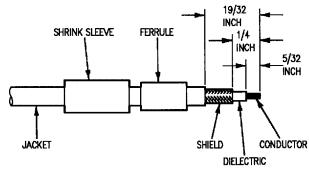
16. SETTING SELECTOR KNOB USING TURRET HEAD.

- a. Refer to data page on turret head assembly. The correct selector number is listed below the wire size and opposite the contact size.
 - b. Remove the safety clip lock from selector knob.
- c. Raise selector knob and rotate to selector number found on data plate.
 - d. Replace safety clip.

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

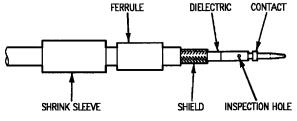
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

- 1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over
- cable. Adjust cable stripper 45-165 for cable with 11/32-inch between blades see (paragraph 5). Strip cable jacket 19/32-inch and shield 1/4-inch. Using sharp knife remove 5/32-inch of dielectric.



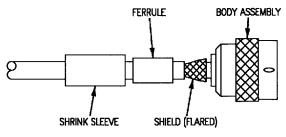
F/A-18-WRM-(310-1)01-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-12 (Blue) turret head and M22520/1-01 crimping tool handle, crimp contact using setting 3 (see paragraph 13).



F/A-18-WRM-(320-1)01-CATI

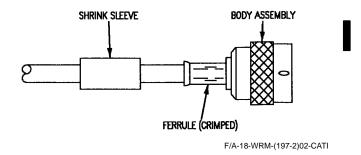
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(197-1)02-CATI

Figure 10. M39012/26-0502 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using Y204 die set and M22520/5-01 crimping tool handle, crimp ferrule in A cavity of die set (see paragraph 9).



5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.

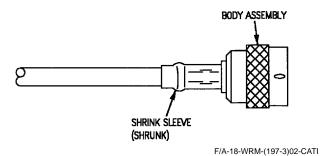
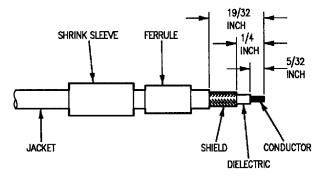


Figure 10. M39012/26-0502 Coaxial Connector Repair (Sheet 2)

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

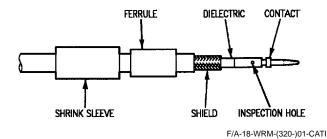
To prevent premature failure of connector, do not nick center conductor while trimming electric.

- 1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over
- cable. Adjust cable stripper 45-165 for cable with 11/32-inch between blades (see paragraph 5). Strip cable jacket 19/32-inch and shield 1/4-inch. Using sharp knife remove 5/32-inch of dielectric.

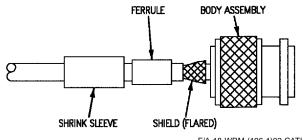


F/A-18-WRM-(310-1)01-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-12 (Blue) turret head and M22520/1-01 crimping tool handle, crimp contact using setting 5 (see paragraph 13).



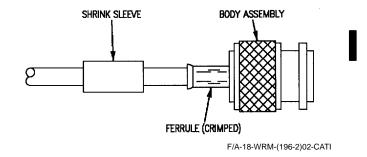
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(196-1)02-CATI

Figure 11. M39012/26-0503 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-05 die set and M22520/5-01 crimping tool frame, crimp ferrule in A cavity of die set (see paragraph 9).



5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stan-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.

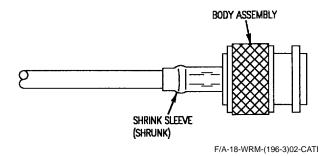
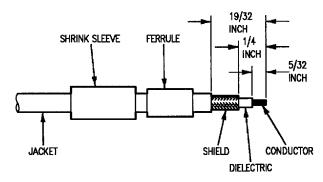


Figure 11. M39012/26-0503 Coaxial Connector Repair (Sheet 2)

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

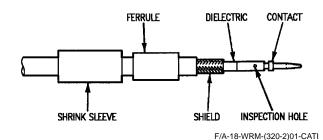
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

- 1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over
- cable. Adjust cable stripper 45-165 for cable with 11/32-inch between blades (see paragraph 5). Strip cable jacket 19/32-inch and shield 1/4-inch. Using sharp knife remove 5/32-inch of dielectric.



F/A-18-WRM-(310-1)01-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contract. Using M22520/1-12 (Red) turret head and M22520/1-01 crimp tool handle crimp contact using Setting 5 (see paragraph 13).



3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.

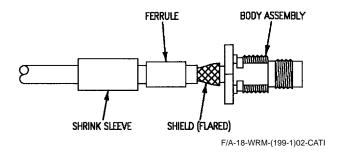
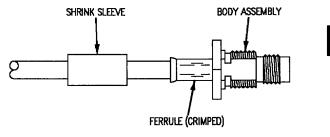


Figure 12. M39012/28-0503 and M399012/28-0018 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-05 die set and M22520/5-01 crimping tool frame, crimp ferrule in A cavity of die set (see paragraph 9).



F/A-18-WRM-(199-2)02-CATI

5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.

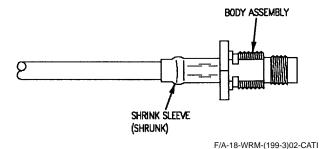
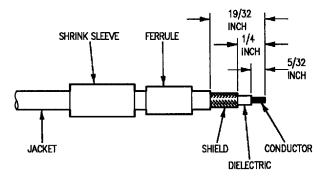


Figure 12. M39012/28-0503 and M399012/28-0018 Coaxial Connector Repair (Sheet 2)

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

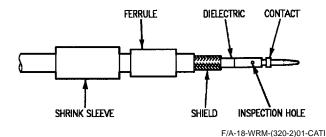
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

- 1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over
- cable. Adjust cable stripper 45-165 for cable with 11/32-inch between blades (see paragraph 5). Strip cable jacket 19/32-inch and shield 1/4-inch. Using sharp knife remove 5/32-inch of dielectric.

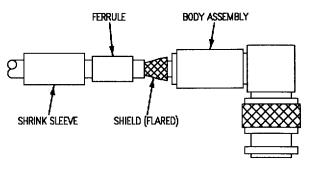


F/A-18-WRM-(310-1)01-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-12 (Green) turret heat and M22520/1-01 crimp tool handle, crimp contact using setting 5 (see paragraph 13).



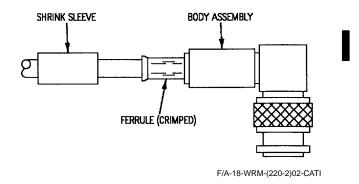
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(220-1)02-CATI

Figure 13. M39012/30-0503 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-05 die set and M22520/5-01 crimping tool frame, crimp ferrule in A cavity of die set (see paragraph 9).



5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.

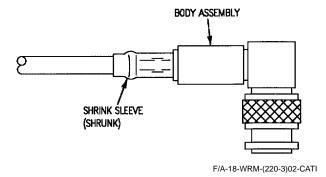
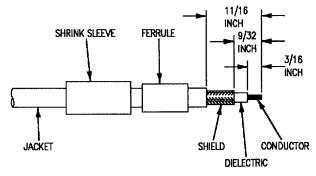


Figure 13. M39012/30-0503 Coaxial Connector Repair (Sheet 2)

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

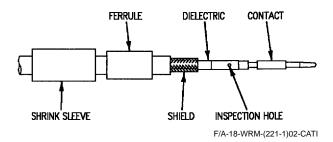
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

- 1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over
- cable. Adjust cable stripper 45-164 for cable with 13-32-inch between blades (see paragraph 5). Strip cable jacket 11/16-inch and shield 9/32-inch. Using sharp knife remove 3/16-inch of dielectric.



F/A-18-WRM-(148-1)02-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/-13 (Blue) turret head and M22520/1-01 crimp tool handle, crimp contact using setting 8 (see paragraph 13).



3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.

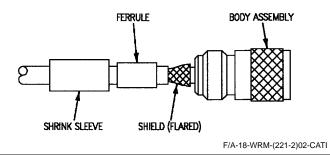
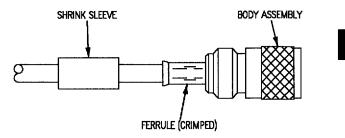


Figure 14. 31-4372-1, 31-4372-2, 31-4372-3, and 31-4372-9 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-05 die set and M22520/5-01 crimping tool frame, crimp ferrule in A cavity of die set (see paragraph 9).



F/A-18-WRM-(221-3)02-CATI

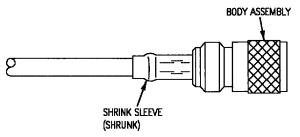
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.



F/A-18-WRM-(221-4)02-CATI

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA

101-T4100A-75 (MIL-C-39012) TNC TYPE COAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No
Coaxial Cable Strippers 45-163 Adjustment and Use	3
Depth of Cut Adjustment	3
Use	4
Description	2
Jacket Cut Adjustment, Figure 1	3
Materials Required	2
Operation, Figure 2	4
Procedure	3
Reference Designation to Figure Number Index	2
Soldering	4
Soldering Contact to Center Conductor	5
Tinning Center Conductor	4
Soldering Contact to Conductor, Figure 5	5
Support Equipment Required	2
Tinning Center Conductor, Figure 3	4
Unacceptable Conditions After Soldering Contacts, Figure 6	6
Unacceptable Conditions After Tinning, Figure 4	5
101-T4100A-75 (MIL-C-39012) Coax Connector Repair, Figure 7	7

Record of Applicable Technical Directives

None

Reference Designation to Figure		Materials Required	
Reference	Number Index	Specificationor Part Number	Nomenclature
Designation	Figure No.		
76J-F029	7	SN60WRMAP2-0-040	Solder

1. **DESCRIPTION**.

2. The 101-T4100A-75 coaxial connector is a single conductor, right angle soldered pin jack (RG 400 cable) and has a temperature range of -85 $^{\circ}$ to +257 $^{\circ}$ F.

Support Equipment Required

Part Number or Type Designation	Nomenclature
3308AS100	Repair Set - Wire and
	Connector
-	Torque Wrench, 0 to 75
	Inch-pounds
-	Torque Wrench 0 to 50
	Inch-Pounds

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table in this WP for correct figure.

5. COAXIAL CABLE STRIPPERS 45-163 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

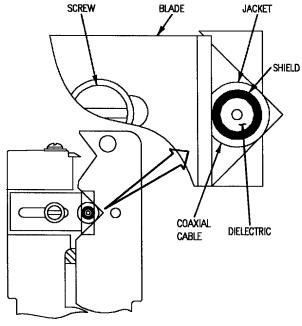
6. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

a. Position coaxial cable in stripper until the end butts against the blade. See figure 1.

b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.



F/A-18-WRM-(409-3)01-CATI

Figure 1. Jacket Cut Adjustment

- c. Adjust other blade so blade does not touch cable.
- d. If necessary, repeat steps 6a through 6c until blade cuts through jacket without damaging shield.

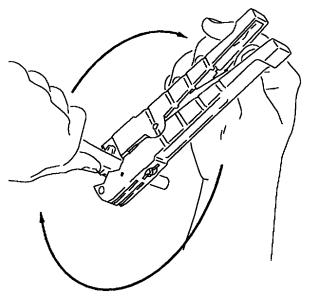
7. USE.

a. Position stripper on cable so that blades face down. See figure 2.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket.



F/A-18-WRM-(409-1)01-SCAN

Figure 2. Operation

8. SOLDERING.

9. Soldering provides a mechanical and electrical bond between metallic components. To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

10. TINNING CENTER CONDUCTOR.

- a. Clean and tin soldering iron.
- b. Make sure center conductor wires are twisted together in the same direction as the lay of wire.
- c. Apply heat and solder to center conductor. Remove heat when solder flows into center conductor. Apply only enough solder to join wires together. Individual wires should be coated with solder yet their shape visible. See figure 3.

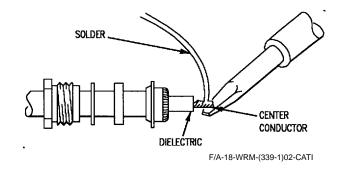


Figure 3. Tinning Center Conductor

- d. The below conditions are unacceptable: See figure 4.
 - (1) Individual wires not joined to center conductor.
 - (2) Excessive solder.
 - (3) Damaged dielectric.

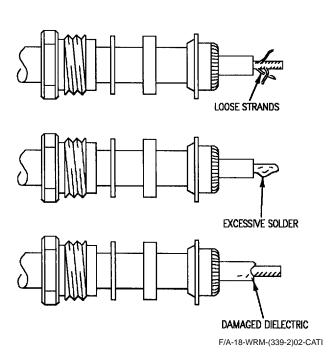


Figure 4. Unacceptable Conditions
After Tinning

11. SOLDERING CONTACT TO CENTER CONDUCTOR.

- a. Clean and tin soldering iron.
- b. Apply heat and solder to conductor and contact. See figure 5.

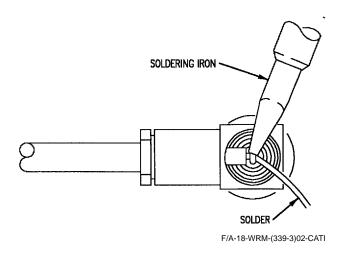


Figure 5. Soldering Contact to Conductor

- c. Inspect solder joint. Solder should be shiny and flow smoothly from center conductor to contact. The below conditions are unacceptable. See figure 6.
 - (1) Damaged dielectric.
 - (2) Too much solder.

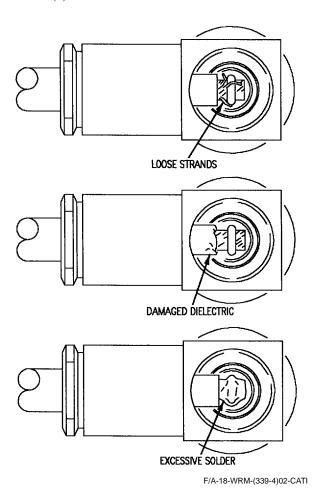
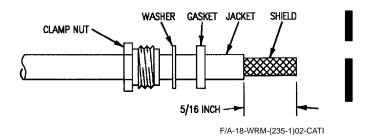


Figure 6. Unacceptable Conditions
After Soldering Contacts

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

1. Using 45-123 wire cutters, cut end of cable square. Slide clamp nut, washer, and gasket over cable. Grooved end of gasket must face end of cable. Using coaxial stripper 45-163 adjusted for cable, remove 5-16-inch of jacket (see paragraph 5).

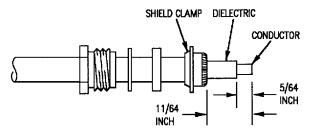


2. Slide shield clamp, with tapered end towards gasket, over shield and against jacket.

NOTE

Shield strands must be smoothly and evenly distributed around face of shield clamp.

3. Comb and flare out shield. Fold shield over shield clamp and trim even with face of shield clamp.

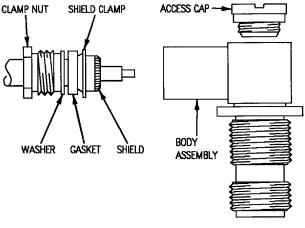


F/A-18-WRM-(235-2)02-CATI

To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

4. Using sharp knife, remove 5/64-inch of dielectric.

5. Using W60-3 soldering iron, tin center conductor. See paragraph 10. Remove access cap from body assembly. Slide body assembly over cable until it stops. Make sure groove in gasket goes over beveled edge of shield clamp.



F/A-18-WRM-(235-3)02-CATI



To prevent damage to connector assembly, do not allow body assembly to rotate while tightening clamp nut.

- 6. While supporting body assembly, torque clamp nut 25 inch-pounds.
- 7. Make sure conductor is centered in contact. Using W60-3 soldering iron, solder conductor to contact. See paragraph 11.

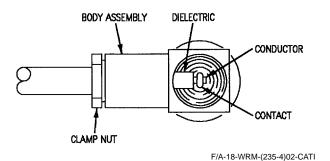


Figure 7. 101-T4100A-75 Coax Connector Repair (Sheet 2)

8. Install access cap. Tighten cap until cap is flush against body assembly.

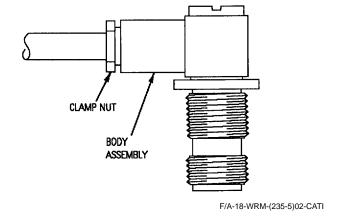


Figure 7. 101-T4100A-75 Coax Connector Repair (Sheet 3)

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

31-4371-3001 AND 31-4371-3009 (MIL-C-39012) TNC TYPE COAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No.
Coaxial Cable Strippers 45-164 Adjustment and Use	3
Depth of Cut Adjustment	3
Distance Adjustment	3
Use	4
Crimp Tool Handle M22520/1-01 Assembly and Adjustments	7
Adjusting Turret Head Before Crimping	8
Removal and Installation of Turret Head	7
Setting Selector Knob Using Turret Head	8
Crimp Tool M22520/5-01 Assembly and Use	5
Crimp Procedure	5
Die Installation	5
Die Removal	6
Crimping Operation, Figure 6	5
Description	2
Die Installation, Figure 5	5
Distance Adjustment, Figure 1	3
Jacket Cut Adjustment, Figure 2	3
Lower Die Removal, Figure 8	6
Materials Required	2
M22520/1-01 Crimp Tool Handle and Turret Head, Figure 9	7
Operation, Figure 4	4
Procedure	2
Reference Designation to Figure Number Index	2
Shield Cut Adjustment, Figure 3	4
Support Equipment Required	2
Upper Die Removal, Figure 7	6
31-4371-3001 and 31-4371-3009 Coaxial Connector Repair, Figure 10	9

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

Figure No.
10
10
10
10
10
10

1. DESCRIPTION.

2. The TCN-type coaxial connector is a general purpose, threaded coupling connector used with large coaxial cable. These connectors meet the requirements of MIL-C-39012.

Support Equipment Required

Part Number or Type Designation	Nomenclature
HT-900 .	Heat Tool
3308AS100	Repair Set - Wire and
	Connector
1317AS100-1	Nitrogen Servicing
	Unit - NAN-3

Materials Required

Specification or Part Number	Nomenclature
MS23053/5-XXX-O	Shrink Sleeve
3. PROCEDURE.	
NAA	1000000 4



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table within this work package for correct figure.

5. COAXIAL CABLE STRIPPERS 45-164 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

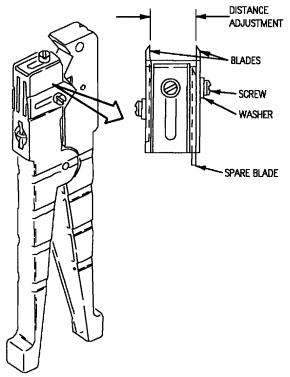
6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting one spare blade will change distance between blade 3/64-inch.

- c. Install screws and tighten finger tight.
- d. Adjust depth of cut.



F/A-18-WRM-(409-2)01-SCAN

Figure 1. Distance Adjustment

7. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.

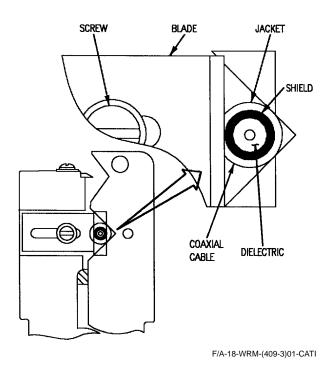


Figure 2. Jacket Cut Adjustment

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

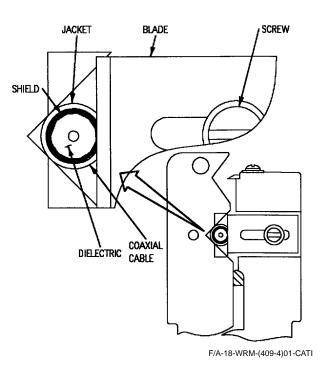


Figure 3. Shield Cut Adjustment

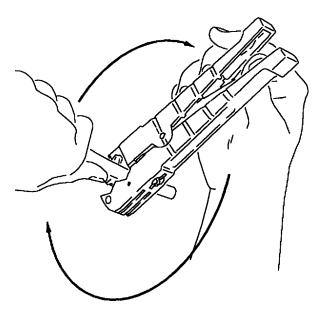
8. USE.

a. Position stripper on cable so that blades face down. See figure 4.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.



F/A-18-WRM-(409-1)01-SCAN

Figure 4. Operation

9. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

10. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 5.
- b. Close handle to make sure dies are seated and locked in place.

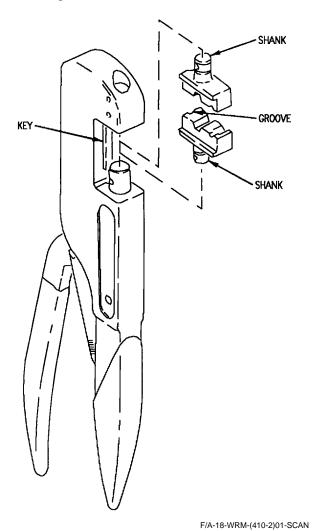


Figure 5. Die Installation

11. CRIMP PROCEDURE.

- a. Position crimping material in correct cavity of dies. See figure 6.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

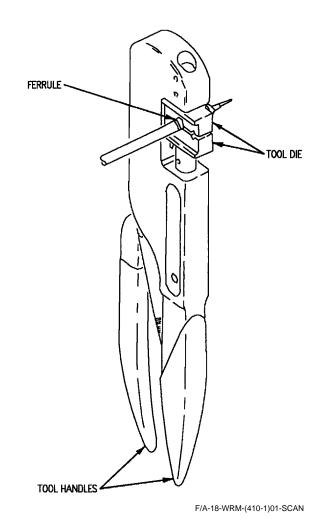


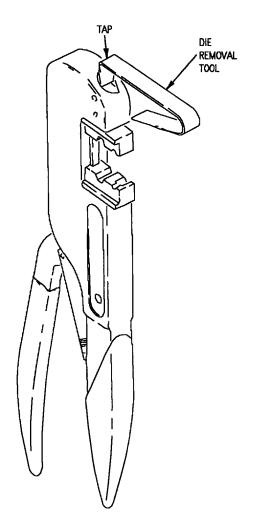
Figure 6. Crimping Operation

12. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 7.



F/A-18-WRM-(410-3)01-SCAN

Figure 7. Upper Die Removal

- b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.
- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 8.

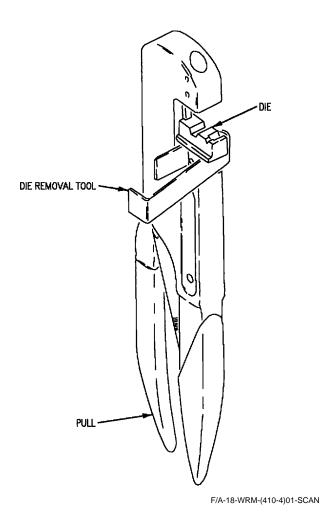


Figure 8. Lower Die Removal

d. Pull handle open with a snap action. The die will be released from the lock spring and can be removed by hand.

13. CRIMP TOOL HANDLE M22520/1-01 ASSEMBLY AND ADJUSTMENTS.

NOTE

Make sure crimp tool is operating correctly by using M22520/3-1 inspection gage.

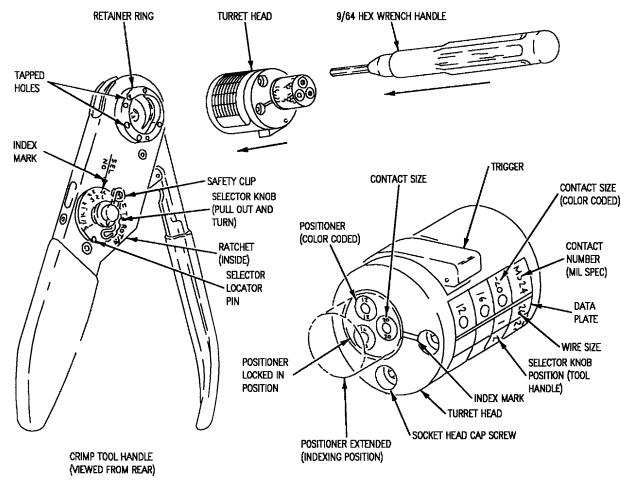
a. Select turret head or universal position head needed for applicable connector.

NOTE

Tool handle shall be fully open when inserting turret or positioner head and when changing selector positions.

14. REMOVAL AND INSTALLATION OF TURRET HEAD.

- a. Press trigger on turret head releasing positioner to extended (indexing) position. See figure 9.
- b. Seat turret head onto retainer ring on back of tool with screws lined up with tapped holes.
- c. Tighten socket head screws with a 9/64-inch allen wrench.
- d. To remove, loosen socket head screw until threads are disengaged from tapped holes, open handles completely and lift off crimp tool.



F/A-18-WRM-(405-1)01-SCAN

Figure 9. M22520/1-01 Crimp Tool Handle and Turret Head

15. ADJUSTING TURRET HEAD BEFORE CRIMPING.

- a. Press trigger on turret head releasing positioner to extended (indexing) position.
- b. Select positioner desired from color data plate on side of turret head assembly.
- c. Rotate positioners until color coded positioner is lined up with index mark.
- d. Press positioner into turret head snaps into locked position.

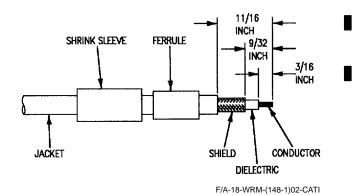
16. SETTING SELECTOR KNOB USING TURRET HEAD.

- a. Refer to data plate on turret head assembly. The correct selector number is listed below the wire size and opposite the contact size.
 - b. Remove the safety clip lock from selector knob.
- c. Raise selector knob and rotate to selector number found on data plate.
 - d. Replace safety clip.

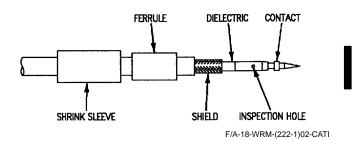
To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off. 24vdc battery voltage exists in some wiring.

To prevent premature failure of conductor, do not nick center conductor while trimming dielectric.

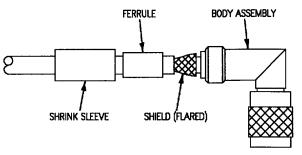
1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-164 for cable with 13/32-inch between blades (see paragraph 5). Strip cable jacket 11/16-inch and shield 9/32-inch. Using sharp knife, remove 3/16-inch of dielectric.



2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using M22520/1-13 (Blue) Turret Head and M22520/1-01 Crimp Tool Handle, crimp contact using setting 8 (See paragraph 13).



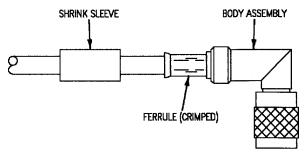
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-WRM-(222-2)02-CATI

Figure 10. 31-4371-3001 and 31-4371-3009 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-25 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 9).



F/A-18-WRM-(222-3)02-CATI

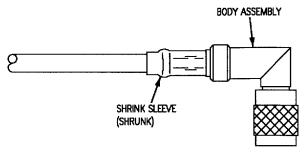
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew station can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.



F/A-18-WRM-(222-4)02-CATI

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

31-34181-2 (MIL-C-39012) TRIAX CONNECTOR REPAIR

Reference Material

Electrical System	. A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No
Coaxial Cable Strippers 45-163 Adjustment and Use	3
Distance Adjustment	3
Inner Jacket Cut Adjustment	5
Outer Jacket and Shield Cut Adjustment	4
Use	5
Crimping Operation, Figure 12	8
Crimp Tool M22520/5-01 Assembly and Use	8
Crimp Procedure	8
Die Installation	8
Die Removal	9
Description	2
Die Installation, Figure 11	8
Distance Adjustment, Figure 1	3
Filling Solder Cup, Figure 8	7
Inner Jacket Cut Adjustment, Figure 4	5
Lower Die Removal, Figure 14	9
Materials Required	2
Operation, Figure 5	5
Outer Jacket Cut Adjustment, Figure 2	4
Outer Shield Cut Adjustment, Figure 3	4
Procedure	3
Reference Designation to Figure Number Index	2
Soldering	6
Soldering Contact to Center Conductor	7
Tinning Center Conductor	6
Soldering Contact to Center Conductor, Figure 9	7
Support Equipment Required	2

Alphabetical Index (Continued)

Subject	Page No
Tinning Center Conductor, Figure 6	6
Unacceptable Conditions After Soldering Contact, Figure 10	7
Unacceptable Conditions After Tinning, Figure 7	6
Upper Die Removal, Figure 13	9
31-34181-2 Triaxial Connector Repair, Figure 15	10

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F/A-18 AFC 54	-	Incorporation of Video Recording Set	1 Dec 91	-

Reference Designation to Figure		Support Equipment Required	
Number Index Reference		Part Number or Type Designation Nomenclature	
Designation	Figure No.	HT-900 3308AS100	Heat Tool Repair Set - Wire and
80J-J020	15		Connector
80J-L021	15	1317AS100-1	Nitrogen Servicing
80J-L022	15		Unit - NAN-3
		BT-ST-751-E	Torque Wrench, 0 to 50
			Inch-Pounds

1. **DESCRIPTION**

2. The TCN-type coaxial connector is a general purpose, threaded coupling connector used with large coaxial cable. These connectors meet the requirements of MIL-C-39012.

Materials Required

Specification or Part Number	Nomenclature
MS23053/5-XXX-0	Shrink Sleeve

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table within this work package for correct figure.

5. COAXIAL CABLE STRIPPERS 45-163 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting one spare blade will change distance between blade 3/64-inch.

c. Install screws and tighten finger tight.

d. Adjust depth of cut.

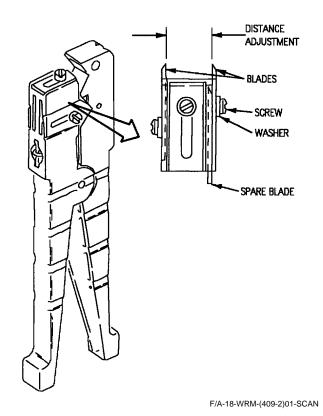


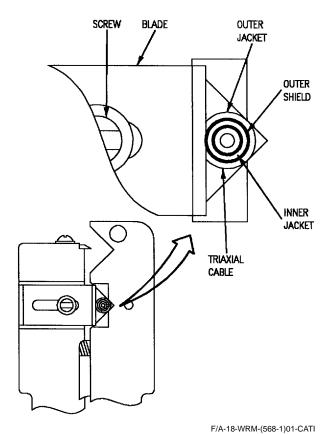
Figure 1. Distance Adjustment

7. OUTER JACKET AND SHIELD CUT ADJUSTMENT.

NOTE

A test strip should be done on spare triax before stripping triax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through outer jacket without nicking outer shield and tighten screw.



- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

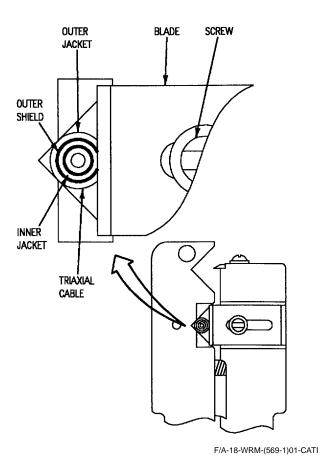


Figure 2. Outer Jacket Cut Adjustment

Figure 3. Outer Shield Cut Adjusment

8. INNER JACKET CUT ADJUSTMENT.

- a. Position cable in stripper until the end butts against the blade. See figure 4.
- b. Adjust blade so it cuts through inner jacket without nicking inner shield and tighten screw.
 - c. Adjust other blade so it does not touch cable.

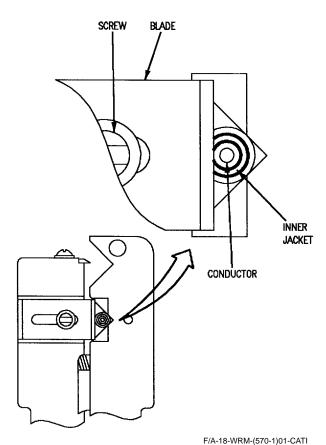


Figure 4. Inner Jacket Cut Adjustment

9. **USE.**

a. Position stripper on cable so that blades face down. See figure 5.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle blade side of stripper. Six to eight rotations will necessary to finish cut.
 - c. Remove stripper from cable.

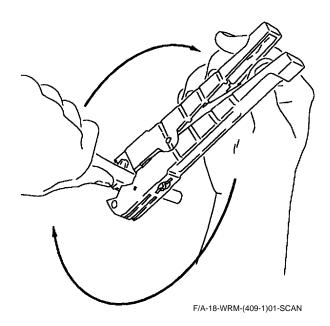


Figure 5. Operation

10. SOLDERING.

11. Soldering provides a mechanical and electrical bond between metallic components. To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

12. TINNING CENTER CONDUCTOR.

- a. Clean and tin soldering iron.
- b. Make sure center conductor wires are twisted together in the same direction as the lay of wire.
- c. Apply heat and solder flows into conductor. Remove heat when solder flows into center conductor. Apply only enough solder to join wires together. Individual wires should be coated with solder yet their shape visible. See figure 6.

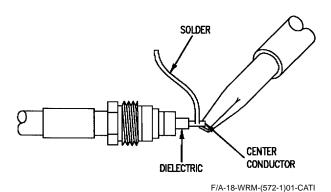
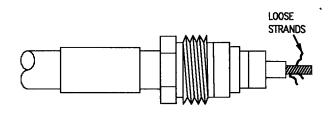
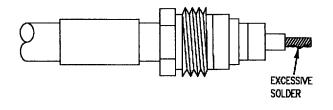
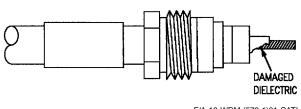


Figure 6. Tinning Center Conductor

- d. The below conditions are unacceptable: See figure 7.
 - (1) Individual wires not joined to center conductor
 - (2) Excessive solder.
 - (3) Damaged dielectric.







F/A-18-WRM-(573-1)01-CATI

Figure 7. Unacceptable Conditions
After Tinning

13. SOLDERING CONTACT TO CENTER CONDUCTOR.

- a. Clean and tin soldering iron.
- b. Apply heat to contact solder cup and fill cup with solder. Avoid getting solder on outside of contact. See figure 8.

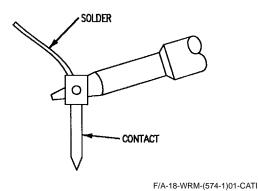


Figure 8. Filling Solder Cup

c. Position contact on center conductor and apply heat to solder cup. When solder melts, slide contact over center conductor. Remove heat as soon as solder flows between center conductor and contact. Hold cable and contact steady until solder hardens. See figure 9.

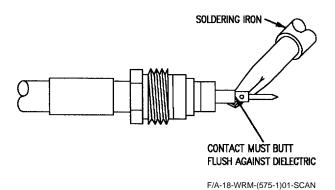
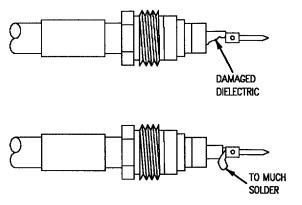


Figure 9. Soldering Contact to Center Conductor

- d. Inspect solder joint. Solder should be shiny and flow smoothly from center conductor to contact. The below conditions are unacceptable. See figure 10.
 - (1) Too much solder.
 - (2) Damaged dielectric.



F/A-18-WRM-(576-1)01-CATI

Figure 10. Unacceptable Conditions After Soldering Contact

14. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

15. **DIE INSTALLATION.**

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 11.
- b. Close handle to make sure dies are seated and locked in place.

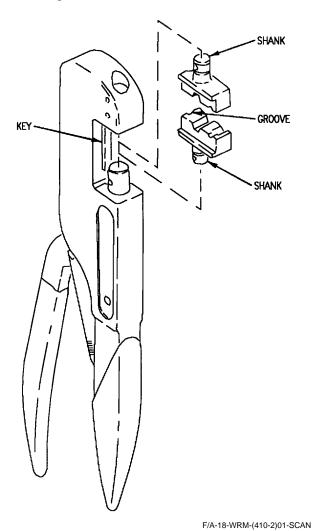


Figure 11. Die Installation

16. CRIMP PROCEDURE.

- a. Position crimping material in correct of dies. See figure 12.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

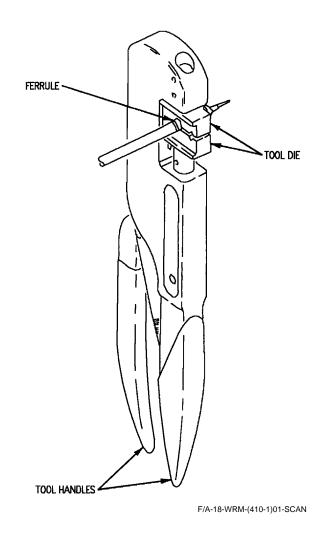


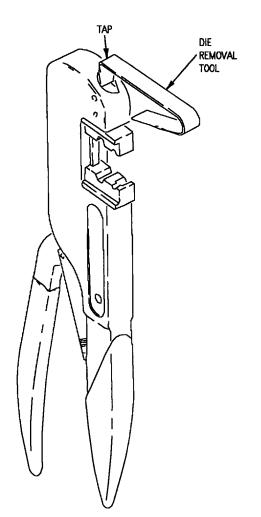
Figure 12. Crimping Operation

17. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 13.



F/A-18-WRM-(410-3)01-SCAN

Figure 13. Upper Die Removal

- b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.
- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 14.

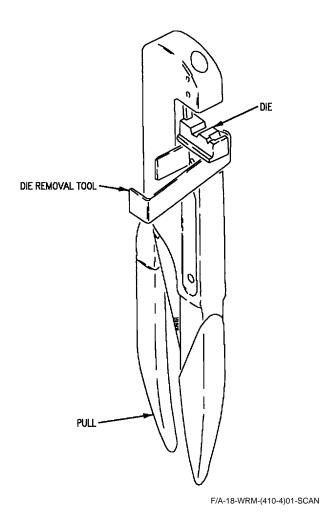


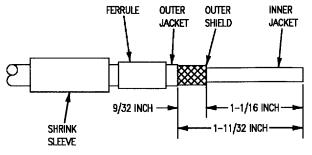
Figure 14. Lower Die Removal

d. Pull handle open with a snap action. The die will be released from the lock spring and can then be removed by hand.

CAUTION

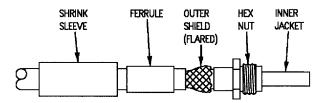
To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

1. Using 45-123 wire cutters, cut end of cable square. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-163 for cable with 9/32-inch between blades (see paragraph 5). Strip outer jacket 1-11/32-inch and outer shield 1-1/16-inch.



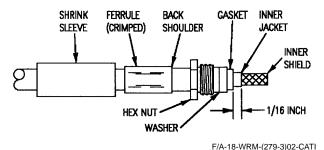
F/A-18-WRM-(279-1)02-CATI

2. Slide hex nut over inner jacket and under outer shield until shield butts against shoulder on hex nut.



F/A-18-WRM-(279-2)02-CATI

3. Slide ferrule forward over shield against back shoulder of hex nut. Using M22520/05-19 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 14). Slide washer and gasket over inner jacket and against hex nut adjust cable stripper 45-163 for inner jacker (see paragraph 14). Strip all but 1/16-inch jacket.



4. Slide shield clamp over inner jacket with flat side against gasket. Fold shield back and trim even with edge of shield clamp.

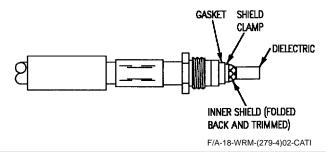


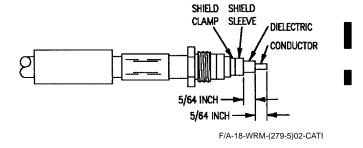
Figure 15. 31-34181-2 Triaxial Connector Repair (Sheet 1)

5. Slide shield sleeve over dielectric and against shield clamp.

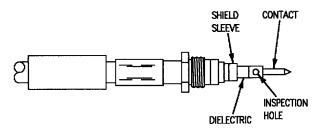


To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

6. Using sharp knife, remove all but 5/64-inch of dielectric. Using 45-123 wire cutters cut center conductor to leave 5-64-inch. Using W60-3 soldering iron, tin center conductor (see paragraph 12).



7. Using W60-3 soldering iron, solder contact to conductor (see paragraph 13).



F/A-18-WRM-(279-6)02-CATI

8. Slide shrink sleeve over ferrule until it butts against hex nut.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

9. Shrink sleeve using heat tool and nitrogen servicing unit.



To prevent damage to connectors, rotate body assembly only when assembled.

10. While holding hex nut, screw body assembly onto hex nut. Torque body assembly 13 to 18 inch-pounds.

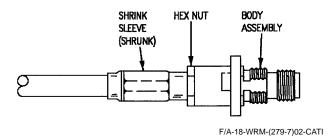


Figure 15. 31-34181-2 Triaxial Connector Repair (Sheet 3)

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

4545-6010 (MIL-C-39012) TNC TYPE COAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No
Coaxial Cable Strippers 45-163 Adjustment and Use	3
Depth of Cut Adjustment	4
Distance Adjustment	3
Use	5
Crimping Operation, Figure 11	8
Crimp Tool M22520/5-01 Assembly and Use	7
Crimp Procedure	8
Die Installation	7
Die Removal	8
Description	2
Die Installation, Figure 10	7
Distance Adjustment, Figure 1	3
Filling Solder Cup, Figure 7	6
Jacket Cut Adjustment, Figure 2	4
Lower Die Removal, Figure 13	9
Materials Required	2
Operation, Figure 4	5
Procedure	2
Reference Designation to Figure Number Index	2
Shield Cut Adjustment, Figure 3	4
Soldering	5
Tinning Center Conductor	5
Soldering Contact to Center Conductor	6
Soldering Contact to Center Conductor, Figure 8	6
Support Equipment Required	2
Tinning Center Conductor, Figure 5	5
Trim Tool CA275-1 Use	9
Trimming Dielectric, Figure 14	9
Upper Die Removal, Figure 12	8

Alphabetical Index (Continued)

Subject	Page No
Unacceptable Conditions After Soldering Contact, Figure 9	7
Unacceptable Conditions After Tinning, Figure 6	6
4545-6010 Coaxial Connector Repair, Figure 15	10

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

Reference Designation Figure No.

61J-D245 15

1. DESCRIPTION.

2. The 4545-6010 is a TNC-type coaxial bulkhead receptacle used with large coaxial cable This connector meets the requirements of MIL-C-39012

Support Equipment Required

Part Number or Type Designation	Nomenclature
HT-900	Heat Tool
3308AS100	Repair Set - Wire and
	Connector
1317AS100-1	Nitrogen Servicing
	Unit NAN-3
-	Torque Wrench 0 to 50
	Inch-Pounds

Materials Required

or Part Number	Nomenclature
MS23053/5-XXX-0	Shrink Sleeve

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table within this work package for correct figure.

5. COAXIAL CABLE STRIPPERS 45-163 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

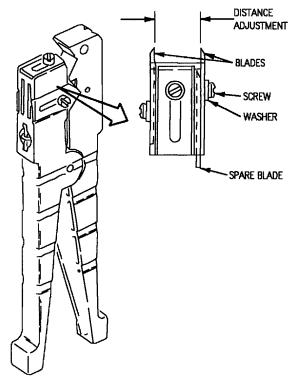
6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting one spare blade will change distance between blade 3/64-inch.

- c. Install screws and tighten finger tight.
- d Adjust depth of cut.



F/A-18-WRM-(409-2)01-SCAN

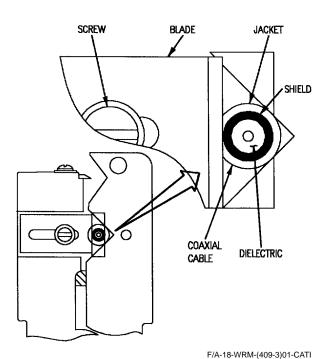
Figure 1. Distance Adjustment

7. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.



- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

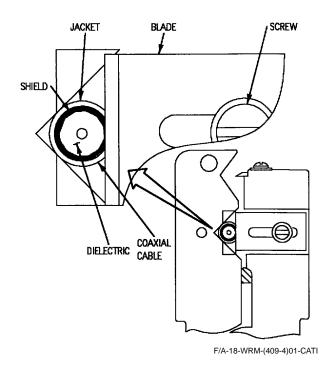


Figure 2. Jacket Cut Adjustment

Figure 3. Shield Cut Adjustment

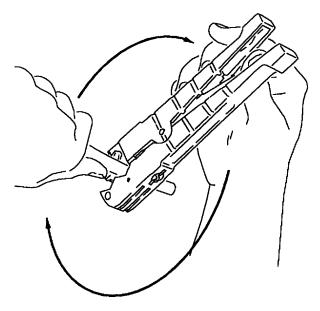
8. USE.

a. Position stripper on cable so that blades face down. See figure 4.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.



F/A-18-WRM-(409-1)01-SCAN

Figure 4. Operation

9. SOLDERING.

10. Soldering provides a mechanical and electrical bond between metallic components To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

11. TINNING CENTER CONDUCTOR.

- a. Clean and tin soldering iron.
- b. Make sure center conductor wires are twisted together in the same direction as the lay of wire.
- c. Apply heat and solder to center conductor. Remove heat when solder flows into center conductor. Apply only enough solder to join wires together. Individual wires should be coated with solder yet their shape visible. See figure 5

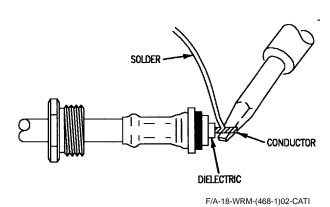
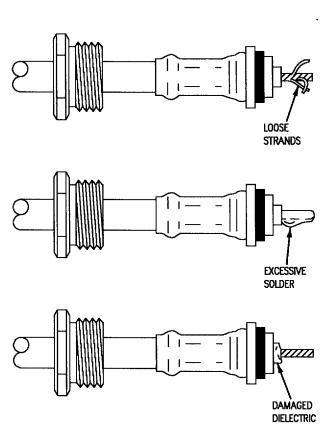


Figure 5. Tinning Center Conductor

- d. The below conditions are unacceptable: See figure 6.
 - (1) Individual wires not joined to center conductor.
 - (2) Excessive solder.
 - (3) Damaged dielectric.



F/A-18-WRM-(468-2)02-CATI

Figure 6. Unacceptable Conditions
After Tinning

12. SOLDERING CONTACT TO CENTER CONDUCTOR.

- a. Clean and tin soldering iron.
- b. Apply heat to contact solder cup and fill cup half full with solder. Avoid getting solder on outside of contact See figure 7.

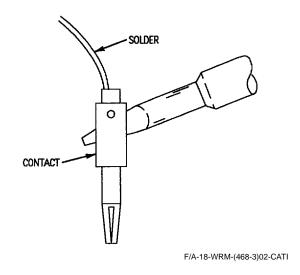
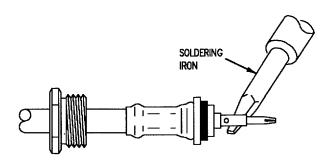


Figure 7. Filling Solder Cup

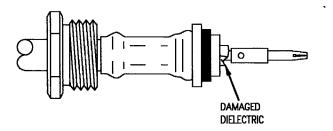
c. Position contact on center conductor and apply heat to solder cup. When solder melts, slide contact over center conductor. Remove heat as soon as solder flows between center conductor and contact. Hold cable and contact steady until solder hardens. See figure 8.



F/A-18-WRM-(468-4)02-CATI

Figure 8. Soldering Contact to Center Conductor

- d. Inspect solder joint. Solder should be shiny and flow smoothly from center conductor to contact. The below conditions are unacceptable. See figure 9
 - (1) Too much solder.
 - (2) Damaged dielectric.



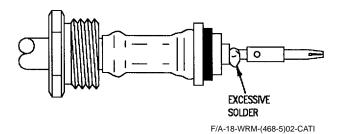
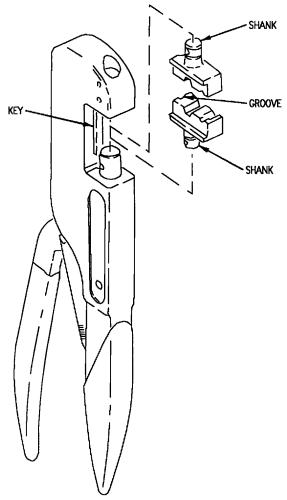


Figure 9. Unacceptable Conditions
After Soldering Contact

13. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

14. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 10.
- b. Close handle to make sure dies are seated and locked in place.



F/A-18-WRM-(410-2)01-SCAN

Figure 10. Die Installation

15. CRIMP PROCEDURE.

- a. Position crimping material in correct cavity of dies. See figure 11.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

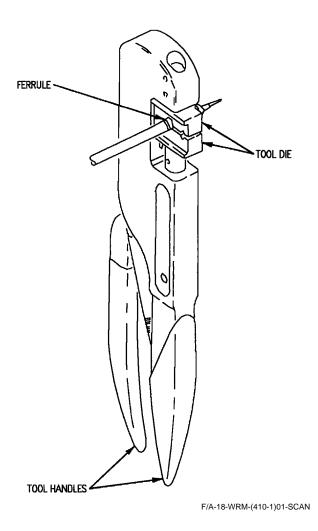


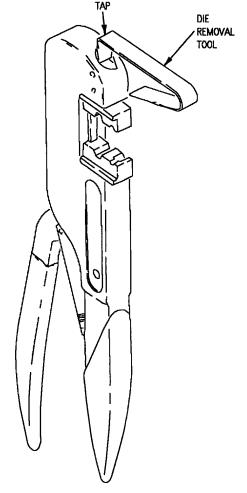
Figure 11. Crimping Operation

16. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 12.



F/A-18-WRM-(410-3)01-SCAN

Figure 12. Upper Die Removal

- b. The die will be released from the lock spring 17 and ejected 1/16-inch. The die can now be removed by hand.
- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 13.

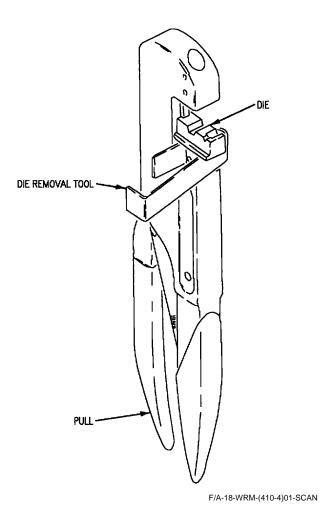


Figure 13. Lower Die Removal

d. Pull handle open with a snap action. The die will be released from the lock spring and can then be removed by hand.

17. TRIM TOOL CA275-1 USE.

- a. Slide tool over dielectric and against support assembly. See figure 14.
- b. Slide knife along face of tool and carefully cut dielectric.
 - c. Remove dielectric and trim tool.

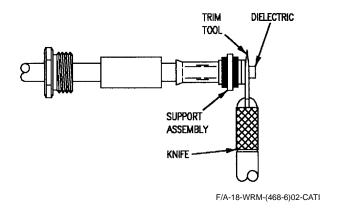
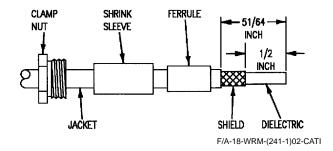


Figure 14. Trimming dielectric

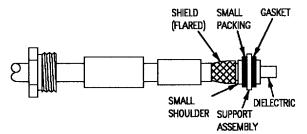
CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- 1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide clamp nut, shrink sleeve and ferrule over cable. Adjust cable stripper 45-163 for cable with
- over cable. Adjust cable stripper 45-163 for cable with 19/64-inch between blades (see paragraph 5). Strip cable jacket 51-64-inch and shield 1/2-inch.

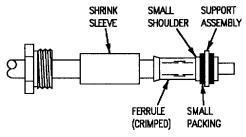


2. Install small packing and gasket on support assembly. Slide support assembly over center conductor and under shield until shield is flush with small shoulder.



F/A-18-WRM-(241-2)02-CATI

3. Slide ferrule over shield until it butts against small shoulder. Using M22520/05-35 die set and M22520-5-01 crimping tool frame, crimp ferrule in the "A" cavity of die set (see paragraph 13).



F/A-18-WRM-(241-3)02-CATI

Figure 15. 4545-6010 Coaxial Connector Repair (Sheet 1)

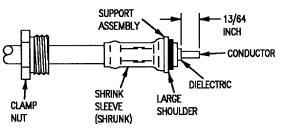
4. Slide shrink sleeve over ferrule until it butts against large shoulder of support assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

5. Shrink sleeve using heat tool and nitrogen servicing unit.



F/A-18-WRM-(241-4)02-CATI

CAUTION

To prevent premature failure of connector, do not nick center conductor when removing dielectric.

- 6. Using trim tool CA275-1 and sharp knife, remove dielectric (see paragraph 17).
- 7. Slide insulator bushing over dielectric and against support assembly. Using W60-3 soldering iron, tin center conductor. See paragraph 11. Using W60-3 soldering iron solder contact to center conductor (see paragraph 12).

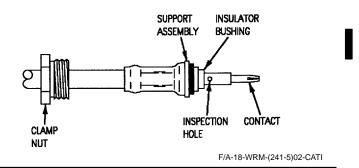


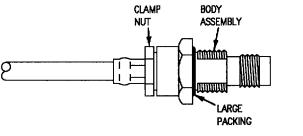
Figure 15. 4545-6010 Coaxial Connector Repair (Sheet 2)

8. Slide body assembly over contact until it stops.



To prevent damage to connector, do not allow connector body to turn while tightening clamp nut.

9. Slide clamp nut into body assembly and engage threads. Torque clamp nut 25 inch-pounds.



F/A-18-WRM-(241-6)02-CATI

Figure 15. 4545-6010 Coaxial Connector Repair (Sheet 3)

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

SF4592-6005 (MIL-C-39012) TNC TYPE COAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No
CA275-2 Trim Tool Use	7
Coaxial Cable Strippers 45-163 Adjustment and Use	3
Depth Adjustment	3
Distance Adjustment	3
Use	4
Crimping Operation, Figure 6	5
Crimp Tool M22520/5-01 Assembly and Use	5
Crimp Procedure	5
Die Installation	5
Die Removal	6
Description	2
Die Installation, Figure 5	5
Distance Adjustment, Figure 1	3
Jacket Cut Adjustment, Figure 2	3
Lower Die Removal, Figure 8	6
Materials Required	2
Operation, Figure 4	4
Procedure	2
Reference Designation to Figure Number Index	2
SF4592-6005 Coaxial Connector Repair, Figure 10	8
Shield Cut Adjustment, Figure 3	4
Support Equipment Required	2
Trimming Center Conductor, Figure 9	7
Upper Die Removal, Figure 7	6

Record of Applicable Technical Directives

Reference Designation to Figure Number Index

Reference Designation	Figure No.
61P-A246C	10
61P-G244	10
61P-G245	10

1. DESCRIPTION.

2. The 4592-6005 right angle connector is a TNC-type coaxial connector. This connector meets the requirements of MIL-C-39012.

Support Equipment Required

Part Number or Type Designation	Nomenclature
HT-900	Heat Tool
3308AS100	Repair Set - Wire and
	Connector
1317AS100-1	Nitrogen Servicing
	Unit - NAN-3
BT-ST-751-E	Torque Wrench, 0 to
	50 Inch-Pounds

Materials Required

Specification or Part Number	Nomenclature
MS23053/5-XXX-0	Shrink Sleeve
FREON TF	Cleaning Compound

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table within this work package for correct figure.

5. COAXIAL CABLE STRIPPERS 45-163 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting one spare blade will change distance between blades 3/64 inch.

- c. Install screws and tighten finger tight.
- d. Adjust depth of cut.

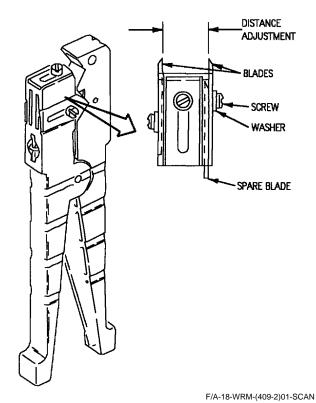


Figure 1. Distance Adjustment

7. DEPTH ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.

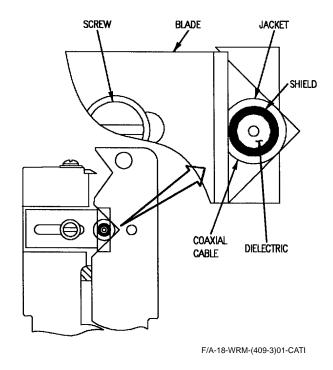


Figure 2. Jacket Cut Adjustment

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

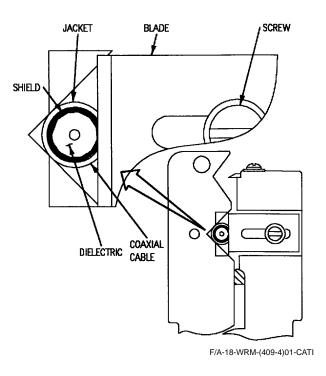


Figure 3. Shield Cut Adjustment

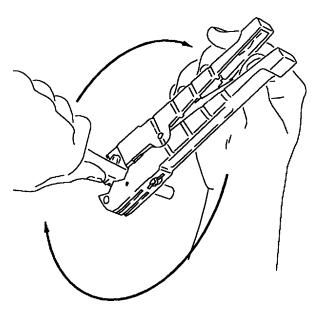
8. USE.

a. Position stripper on cable so that blades face down. See figure 4.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle blade side of stripper. Six to eight rotations will necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.



F/A-18-WRM-(409-1)01-SCAN

Figure 4. Operation

9. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

10. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 5.
- b. Close handle to make sure dies are seated and locked in place.

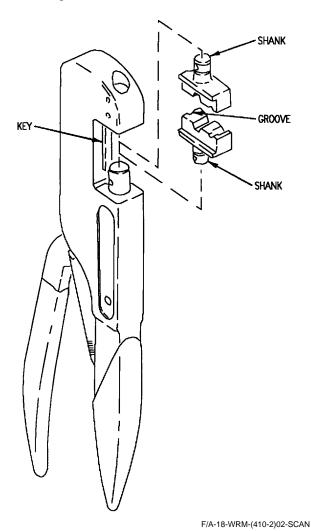


Figure 5. Die Installation

11. CRIMP PROCEDURE.

- a. Position crimping material in correct cavity of dies. See figure 6.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

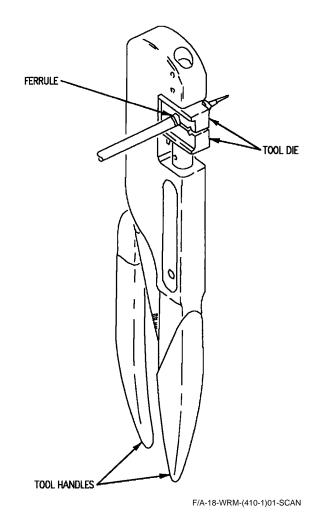


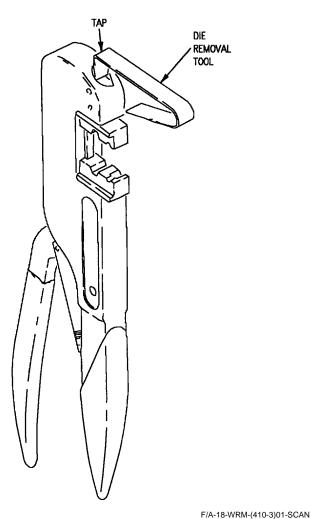
Figure 6. Crimping Operation

12. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 7.



17/10 William (410 0)01 00

- b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.
- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 8.

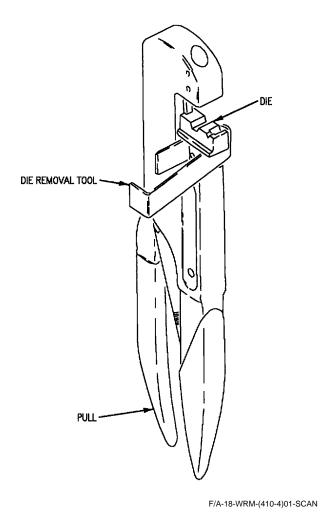


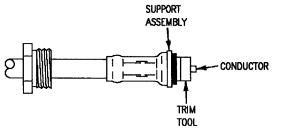
Figure 8. Lower Die Removal

Figure 7. Upper Die Removal

d. Pull handle open with a snap action. The die will be released from the lock spring and can be removed by hand.

13. CA275-2 TRIM TOOL USE.

- a. Position trim tool over conductor and against support assembly. See figure 9.
 - b. Cut off conductor flush with trim tool.
 - c. Remove trim tool.



F/A-18-WRM-(241-7)02-CATI

Figure 9. Trimming Center Conductor

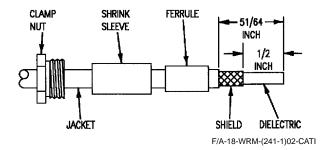
WARNING

FREON TF is an asphyxiant and toxic to skin and eyes. The vapor is hazardous and can cause death if too much is breathed. Vapor from one pint of liquid evaporated in a small room is nearly odorless but immediately dangerous to life or health. In case of spill, warn others and leave the area immediately. Avoid breathing vapors, avoid skin and eye contact. Do not use in open baths. Use minimal amounts with good ventilation.

CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

1. Using 45-123 wire cutters, cut end of cable square. Clean all metallic parts of connector with Cleaning Compound. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide clamp nut, shrink sleeve, and ferrule over cable. Adjust cable stripper 45-163 for cable, with 19/64-inch between blades (see paragraph 5). Strip cable jacket 51-64-inch and shield 1/2-inch.



2. Remove foil from between shields. Clean stripped portion of cable with Cleaning Compound. Make sure small packing and gasket are installed on support assembly. Slide support assembly over dielectric and under shield until shield butts against small shoulder.

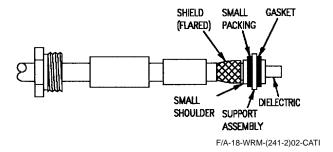
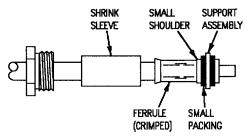


Figure 10. SF4592-6005 Coaxial Connector Repair (Sheet 1)

3. Slide ferrule forward against small shoulder. Using M22520/5-35 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 9).



F/A-18-WRM-(241-3)02-CATI

4. Slide shrink sleeve forward over small shoulder and small packing on support assembly.

WARNING

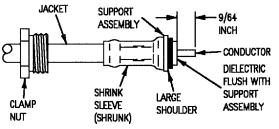
To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion. Use of nitrogen with heat tool in an enclosed area is dangerous. Discharge of nitrogen into a poorly ventilated area such as wheel wells. stand-up bays, or crew stations can result in asphyxiation.

5. Shrink sleeve using heat tool and nitrogen servicing unit.



To prevent premature failure of connector, do not nick conductor while trimming dielectric.

6. Using sharp knife, trim dielectric flush with support assembly. Using trim tool CA275-2, trim conductor (see paragraph 13). Protect dielectric face and slightly chamfer end of conductor. Clean dielectric with cleaning compound.



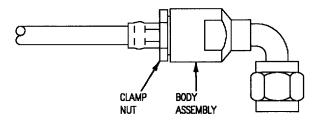
F/A-18-WRM-(242-1)02-CATI

Figure 10. SF4592-6005 Coaxial Connector Repair (Sheet 2)

CAUTION

To prevent damage to conductor, do not allow body assembly to turn while tightening clamp nut.

7. Insert cable assembly into body assembly and engage threads of clamp nut. Torque nut 25 inch-pounds.



F/A-18-WRM-(242-2)02-CATI

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA

31-8473-5 (MIL-C-39012) TNC TYPE COAX CONNECTOR REPAIR

Reference Material

Electrical System	.C-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No.
Coaxial Cable Strippers 45-163 Adjustment and Use	3
Depth of Cut Adjustment	3
Use	3
Description	2
Filling Solder Cup, Figure 5	5
Jacket Cut Adjustment, Figure 1	3
Materials Required	2
Operation, Figure 2	3
Procedure	2
Reference Designation to Figure Number Index	2
Soldering	4
Soldering Contact to Center Conductor	5
Tinning Center Conductor	4
Soldering Contact to Center Conductor, Figure 6	5
Support Equipment Required	2
Tinning Center Conductor, Figure 3	4
Unacceptable Conditions After Soldering, Figure 7	5
Unacceptable Conditions After Tinning, Figure 4	4
31-8473-5 (MIL-C-39012) Coax Connector Repair, Figure 8	6

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

Reference Designation

Figure No.

67P-T001G

8

1. **DESCRIPTION.**

2. The 31-8473-5 coaxial connector is a single conductor, soldered pin plug (RG 316 cable) and has a temperature range of -85° to $+257^{\circ}$ F.

Support Equipment Required

Part Number or Type Designation

Nomenclature

3308AS100

Repair Set - Wire and Connector

Materials Required

Specificationor

Part Number Nomenclature

SN60WRMAP2-0-040

Solder

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table in this WP for correct figure.

5. COAXIAL CABLE STRIPPERS 45-163 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

6. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 1.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.

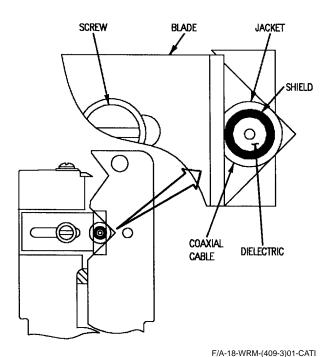


Figure 1. Jacket Cut Adjustment

- c. Adjust other blade so blade does not touch cable.
- d. If necessary, repeat steps 6a through 6c until blade cuts through jacket without damaging shield.

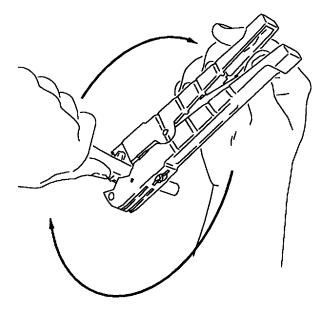
7. USE.

a. Position stripper on cable so that blades face down. See figure 2.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket.



F/A-18-WRM-(409-1)01-SCAN

Figure 2. Operation

8. SOLDERING.

9. Soldering provides a mechanical and electrical bond between metallic components. To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

10. TINNING CENTER CONDUCTOR.

- a. Clean and tin soldering iron.
- b. Make sure center conductor wires are twisted together in the same direction as the lay of wire.
- c. Apply heat and solder to center conductor. Remove heat when solder flows into center conductor. Apply only enough solder to join wires together. Individual wires should be coated with solder yet their shape visible. See figure 3.

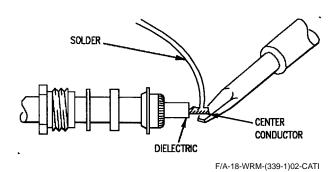


Figure 3. Tinning Center Conductor

- d. The below conditions are unacceptable See figure 4.
 - (1) Individual wires not joined to center conductor.
 - (2) Excessive solder.
 - (3) Damaged dielectric.

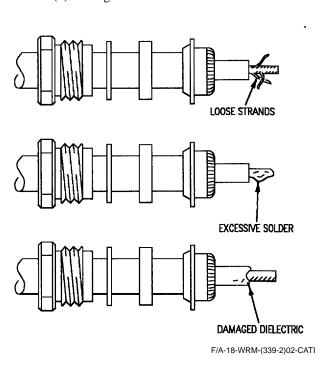


Figure 4. Unacceptable Conditions
After Tinning

11. SOLDERING CONTACT TO CENTER CONDUCTOR.

- a. Clean and tin soldering iron.
- b. Apply heat to contact solder cup and fill cup half full with solder. Avoid getting solder on outside of contact. See figure 5.

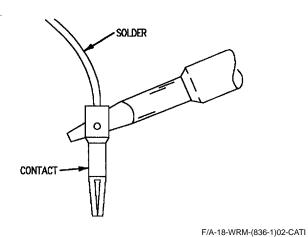
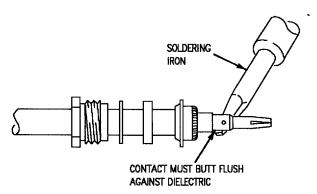


Figure 5. Filling Solder Cup

c. Position contact on center conductor and apply heat to solder cup. When solder melts, slide contact over center conductor. Remove heat as soon as solder flows between center conductor and contact. Hold cable and contact steady until solder hardens. See figure 6.



F/A-18-WRM-(836-2)02-CATI

Figure 6. Soldering Contact to Center Conductor

- d. Inspect solder joint. Solder should be shiny and flow smoothly from center conductor to contact. The below conditions are unacceptable. See figure 7.
 - (1) Too much solder.
 - (2) Damaged dielectric.

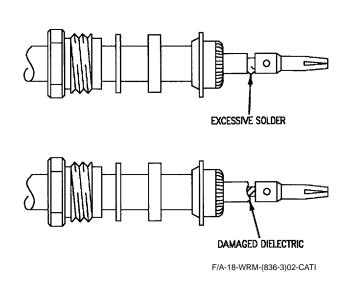
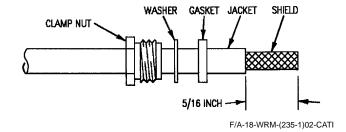


Figure 7. Unacceptable Conditions
After Soldering Contact

CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- 1. Using 45-123 wire cutters, cut end of cable square. Slide clamp nut, washer, and gasket over cable. Grooved end of gasket must face end of cable. Using
- coaxial stripper 45-163 adjusted for cable, remove 5/16-inch of jacket. See paragraph 5.



2. Slide shield clamp, with tapered end towards gasket, over shield and against jacket.

NOTE

Shield strands must be smoothly and evenly distributed around face of shield clamp.

3. Comb and flare out shield. Fold shield over shield clamp and trim even with face of shield clamp.

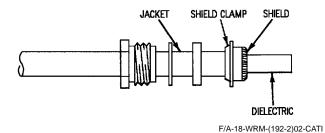
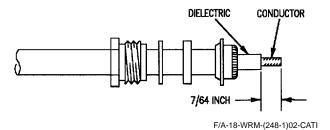


Figure 8. 31-8473-5 (MIL-C-39012) Coax Connector Repair (Sheet 1)

CAUTION

To prevent premature failure of connector, do not nick center of conductor while trimming dielectric.

4. Using sharp knife remove 7/64-inch of dielectric.



5. Using W60-3 soldering iron, tin center conductor. See paragraph 10. Using W60-3 soldering iron, solder contact to center conductor. See paragraph 11.

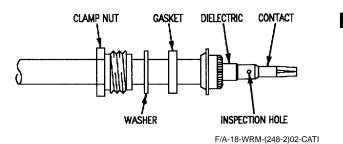


Figure 8. 31-8473-5 (MIL-C-39012) Coax Connector Repair (Sheet 2)

6. Slide body assembly over contact until it stops. Slide gasket, washer, and hex nut into body assembly. Make sure groove in gasket goes over beveled edge of shield clamp.



Do not allow body assembly to rotate on cable while tightening clamp nut.

7. While supporting body assembly, torque clamp nut to 40 inch-pounds minimum using BT-ST-751 torque wrench.

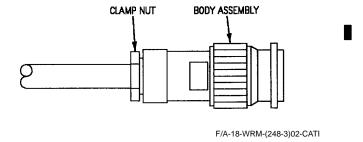


Figure 8. 31-8473-5 (MIL-C-39012) Coax Connector Repair (Sheet 3)

Change 3 – 15 April 2002

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

82-5770, 82-5772-X, 82-5773-X, 82-5967-X AND 82-5992 (MIL-C-49142) TNC TYPE TRIAX CONNECTOR REPAIR

Reference Material

Electrical System	AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00

Alphabetical Index

Subject	Page No.
Coaxial Cable Strippers 45-163 Adjustment and Use	4
Distance Adjustment	4
Inner Jacket Cut Adjustment	5
Outer Jacket and Shield Cut Adjustment	4
Use	6
Crimp Tool M22520/5-01 Assembly and Use	8
Crimp Procedure	9
Die Installation	8
Die Removal	9
Crimping Operation, Figure 12	9
Description	3
Die Installation, Figure 11	8
Distance Adjustment, Figure 1	4
Filling Solder Cup, Figure 8	7
Inner Jacket Cut Adjustment, Figure 4	5
Lower Die Removal, Figure 14	10
Materials Required	3
Operation, Figure 5	6
Outer Jacket Cut Adjustment, Figure 2	4
Outer Shield Cut Adjustment, Figure 3	5
Procedure	3
Reference Designation to Figure Number Index	3
Soldering	6
Soldering Contact to Center Conductor	8
Tinning Center Conductor	6
Soldering Contact to Center Conductor, Figure 9	7
Support Equipment Required	3
Tinning Center Conductor, Figure 6	6

A1-F18AC-WRM-000 Change 3

Alphabetical Index (Continued)

Subject	Page No
Unacceptable Conditions After Soldering Contact, Figure 10	8
Unacceptable Conditions After Tinning, Figure 7	7
Upper Die Removal, Figure 13	9
82–5770 Triaxial Connector Repair, Figure 15	11
82–5772 Triaxial Connector Repair, Figure 16	14
82–5772–1 Triaxial Connector Repair, Figure 16	14
82–5772–2 Triaxial Connector Repair, Figure 16	14
82–5772–3 Triaxial Connector Repair, Figure 16	14
82–5772–4 Triaxial Connector Repair, Figure 16	14
82–5772–5 Triaxial Connector Repair, Figure 16	14
82–5773 Triaxial Connector Repair, Figure 17	18
82–5773–1 Triaxial Connector Repair, Figure 17	18
82–5773–3 Triaxial Connector Repair, Figure 17	18
82–5773–5 Triaxial Connector Repair, Figure 17	18
82–5967 Triaxial Connector Repair, Figure 18	22
82–5967–1 Triaxial Connector Repair, Figure 18	22
82–5967–3 Triaxial Connector Repair, Figure 18	22
82–5967–5 Triaxial Connector Repair, Figure 18	22
82–5992 Triaxial Connector Repair, Figure 15	11

Record of Applicable Technical Directives

Type/ Number	Date	Title and ECP No.	Date Incorp.	Remarks
F18 AFC 253	-	U. S. Naval Reserves A+ Avionics Upgrade (ECP MDA-F/A-18-00560R1)	15 Apr 02	-
F18 AFC 292	-	U. S. Marine Corps Reserves A+ Avionics Upgrade (ECP MDA-F/A-18-00583)	15 Apr 02	-

Change 3

Reference Designation to Figure Number Index

Reference Designation Figure No. 15 61J-E018 61J-E166 15 61J-E176 15 61J-F036 15 61J-F037 15 61J-F038 15 61J-F039 15 15 61J-R036 61J-R037 15 61J-R038 15 61J-R039 15 61J-R175 15 61J-U027 15 61J-V026 15 61J-E018 17 61J-E166 17 61P-E176 17 61P-F001C 16 61P-F001D 16 61P-F001E 16 61P-F001F 16 61P-F001G 16 61P-F001H 16 61P-F001J 16 61P-F001K 16 61P-F001M 16 61P-F036 17 61P-F037 17 61P-F038 17 61P-F039 17 61P-P169 17 61P-R170 16 61P-U027 17 61P-U041 17 17 61P-U265 61P-V026 17 61P-V042 17 61P-V266 17

1. DESCRIPTION.

Part Number or

2. The TNC-type triaxial connector is a threaded coupling connector used with triaxial cable. These connectors meet the requirements of MIL-C-49142.

Support Equipment Required

Type Designation	Nomenclature
HT-900	Heat Tool
3308AS100	Repair Set - Wire and
	Connector
1317AS100-1	Nitrogen Servicing
	Unit - NAN-3

Materials Required

Specification or Part Number	Nomenclature	
MMS-809	Shrink Sleeve	

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table within this work package for correct figure.

Change 3

5. COAXIAL CABLE STRIPPERS 45-163 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting one spare blade will change distance between blade 3/64 inch.

- c. Install screws and handtighten.
- d. Adjust depth of cut.

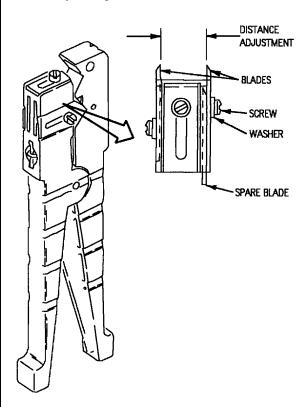


Figure 1. Distance Adjustment

7. OUTER JACKET AND SHIELD CUT ADJUST- MENT.

NOTE

Before stripping triax, a test strip must be done on spare triax.

- a. Position triaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through outer jacket without nicking outer shield and tighten screw.

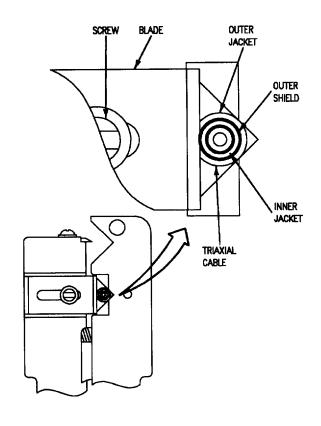


Figure 2. Outer Jacket Cut Adjustment

Change 3

- c. Remove triaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If required, repeat steps 7.a. through 7.d. until blades cut through jacket and shield without damaging shield and dielectric.

8. INNER JACKET CUT ADJUSTMENT.

- a. Position cable in stripper until the end butts against blade. See figure 4.
- b. Adjust blade so it cuts through inner jacket without nicking conductor and tighten screw.
 - c. Adjust other blade so it does not touch cable.

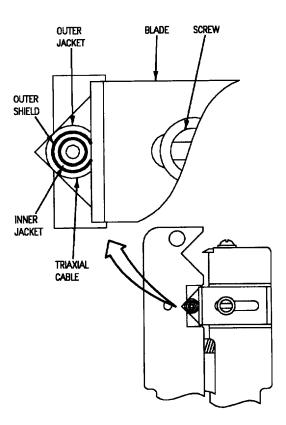


Figure 3. Outer Shield Cut Adjustment

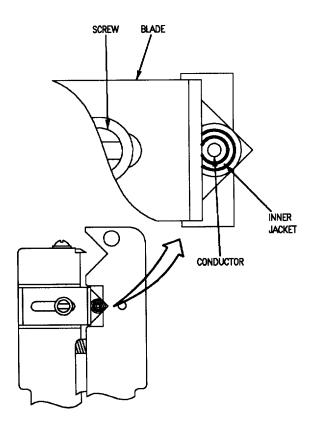


Figure 4. Inner Jacket Cut Adjustment

Change 3

9. **USE.**

a. Position stripper on cable so that blades face down. See figure 5.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations are required to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.

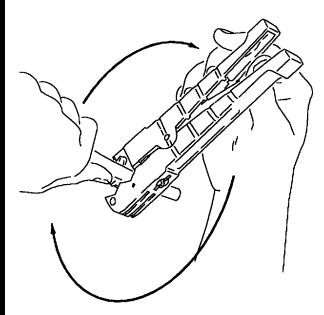


Figure 5. Operation

10. SOLDERING.

11. Soldering provides a mechanical and electrical bond between metallic components. To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

12. TINNING CENTER CONDUCTOR.

- a. Clean and tin soldering iron.
- b. Make sure center conductor wires are twisted together in the same direction as the lay of wire.
- c. Apply heat until solder flows into conductor. Remove heat when solder flows into center conductor. Apply only enough solder to join wires together. Individual wires must be coated with solder keeping their shape visible. See figure 6.

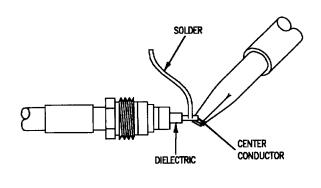
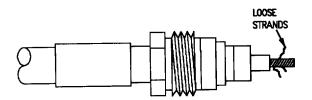
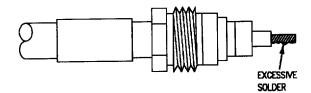


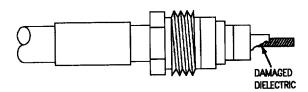
Figure 6. Tinning Center Conductor

d. The below conditions are unacceptable: See figure 7.

A1-F18AC-WRM-000 Change 3







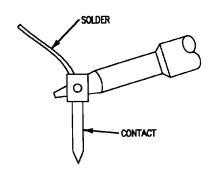
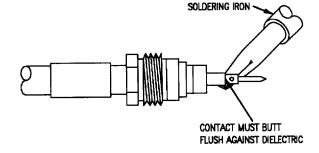


Figure 8. Filling Solder Cup

c. Position contact on center conductor and apply heat to solder cup. When solder melts, slide contact over center conductor. Remove heat as soon as solder flows between center conductor and contact. Hold cable and contact steady until solder hardens. See figure 9

Figure 7. Unacceptable Conditions
After Tinning



13. SOLDERING CONTACT TO CENTER CONDUCTOR.

- a. Clean and tin soldering iron.
- b. Apply heat to contact solder cup and fill cup with solder. Avoid getting solder on outside of contact. See figure 8.

Figure 9. Soldering Contact to Center Conductor

d. Inspect solder joint. Solder must be shiny and flow smoothly from center conductor to contact. See figure 10. The following conditions are unacceptable:

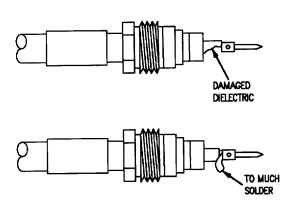


Figure 10. Unacceptable Conditions
After Soldering Contact

14. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

15. **DIE INSTALLATION.**

a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 11.

b. Close handle to make sure dies are seated and locked in place.

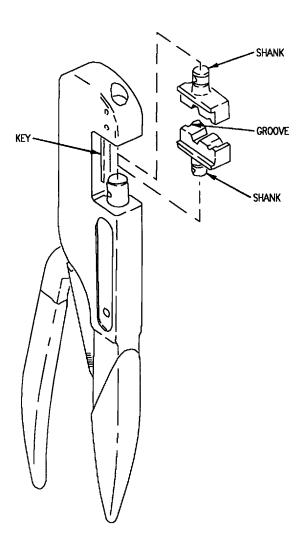


Figure 11. Die Installation

Change 3

16. CRIMP PROCEDURE.

- a. Position items to be crimped in correct cavity of dies. See figure 12.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

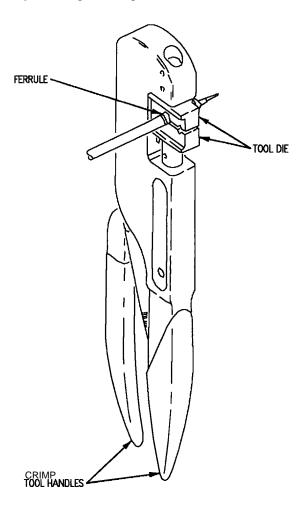


Figure 12. Crimping Operation

17. **DIE REMOVAL.**

NOTE

Die removal tool is furnished with crimp tool. If removal tool is not available, a rod 3/16-inches may be used.

a. With crimp tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 13.

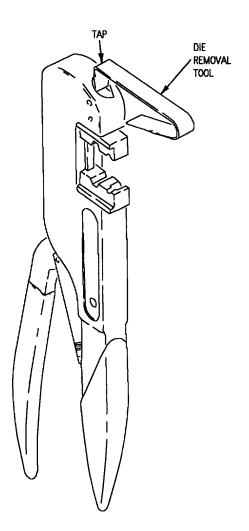


Figure 13. Upper Die Removal

Change 3

- b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.
- c. Close the crimp tool handle and slide the die removal tool between the die and tool body. See figure 14.
- d. Pull handle open with a snap action. The die must be released from the lock spring and can then be removed by hand.

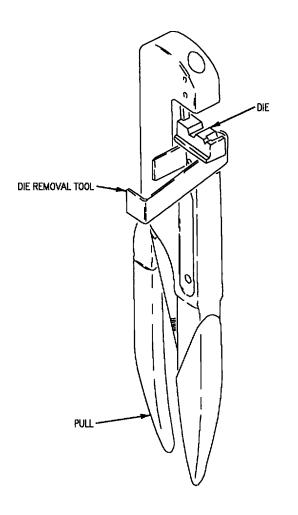
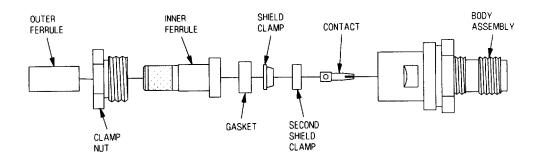


Figure 14. Lower Die Removal

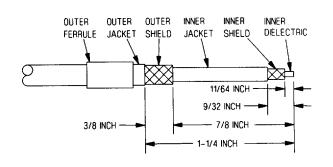


To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

1. Parts and assembly sequence.



2. Using 45-123 wire cutters, cut end of cable square. Slide outer ferrule over cable. Adjust cable stripper 45-163 for cable with 3/8-inch between blades (see paragraph 5). Strip outer jacket 1-1/4 inch and outer shield 7/8-inch. Strip inner jacket 9/32-inch and inner dielectric 11/64-inch.



3. Flare outer shield. Place inner ferrule into clamp nut. Slide clamp nut/inner ferrule over inner jacket and under outer shield until shield butts against clamp nut and ferrule is stopped by the cable jacket.

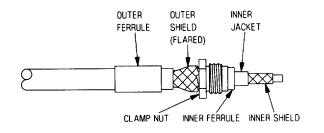
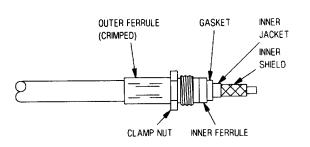


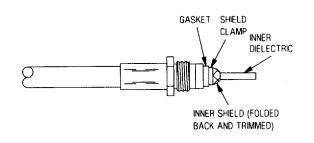
Figure 15. 82-5770 and 82-5992 Triaxial Connector Repair (Sheet 1)

Change 3

4. Slide outer ferrule forward over shield and against back of clamp nut. Using M22520/05–19 die set and M22520/5–01 crimp tool, crimp outer ferrule in the "A" cavity of die set. Next slide crimp tool back toward cable, rotate crimp tool 45 degrees, and double crimp ferrule in order to crimp down on as much jacket as possible to obtain improved strain relief (see paragraph 14). Slide gasket over inner jacket and against inner ferrule.



5. Slide shield clamp over inner jacket with flat side against gasket. Fold shield back and trim even with edge of shield clamp.



6. Slide second shield clamp over inner dielectric, inner shield and against first shield clamp.



To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

7. Using a sharp knife, remove inner dielectric such that 3/32-inch of conductor is exposed. Using W60-3 soldering iron, tin center conductor (see paragraph 12).

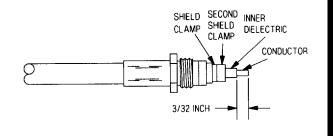


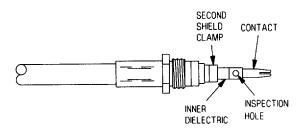
Figure 15. 82-5770 and 82-5992 Triaxial Connector Repair (Sheet 2)

A1-F18AC-WRM-000 Change 3

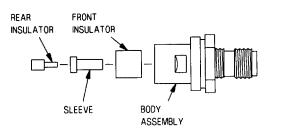
NOTE

When soldering contact, conductor must be visible through inspection hole.

8. Using W60–3 soldering iron, solder contact to conductor (see paragraph 13).



9. Slide front insulator, sleeve and rear insulator into connector body assembly if these pieces are not already installed into the body assembly of the connector.



CAUTION

Do not allow body assembly to rotate on cable while tightening clamp nut.

10. Slide body assembly over contact/cable assembly. While holding body assembly stationary, engage clamp nut to body assembly, tighten clamp nut finger tight. Torque clamp nut, using BT–ST–751 torque wrench, to 43 inch–pounds.

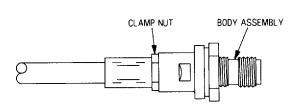


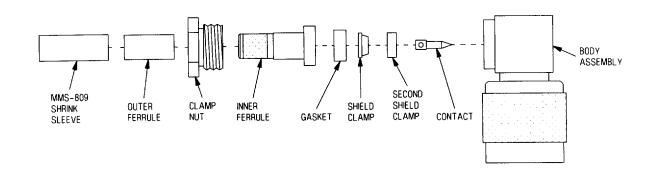
Figure 15. 82-5770 and 82-5992 Triaxial Connector Repair (Sheet 3)

A1-F18AC-WRM-000 Change 3

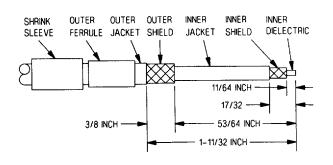


To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00 respectively. When electrical power is off, 24vdc battery voltage exists in some wiring.

1. Parts and assembly sequence.



2. Using 45–123 wire cutters, cut end of cable square. Cut a section of MMS–809 shrink sleeve approximately 3/8–inch longer than outer ferrule. Slide MMS–809 shrink sleeve and outer ferrule over cable. Adjust cable stripper 45–163 for cable with 3/8–inch between blades (see paragraph 5). Strip outer jacket 1–11/32 inch and outer shield 53/64–inch. Strip inner jacket 17/32–inch and inner dielectric 11/64–inch.



3. Flare outer shield. Place inner ferrule into clamp nut. Slide clamp nut/inner ferrule over inner jacket and under outer shield until shield butts against clamp nut and end of ferrule is stopped by the cable jacket.

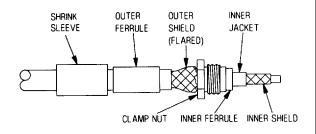
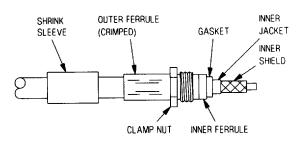
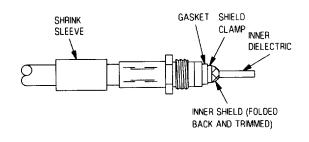


Figure 16. 82-5772, 82-5772-1, 82-5772-2, 82-5772-3, 82-5772-4 and 82-5772-5 Triaxial Connector Repair (Sheet 1)

4. Slide outer ferrule forward over shield against back of clamp nut. Using M22520/05-19 die set and M22520/5-01 crimp tool crimp outer ferrule in the "A" cavity of die set. Slide crimp tool back toward cable, rotate crimp tool 45 degrees, and double crimp ferrule in order to crimp down on as much jacket as possible to obtain improved strain relief (see paragraph 14). Slide gasket over inner jacket and against inner ferrule.



5. Slide shield clamp over inner jacket with flat side against gasket. Fold shield back and trim even with edge of shield clamp.



6. Slide second shield clamp over inner dielectric, inner shield and against first shield clamp.



To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

7. Using a sharp knife, remove inner dielectric so that 3/32-inch of conductor is exposed. Using W60-3 soldering iron, tin center conductor (see paragraph 12).

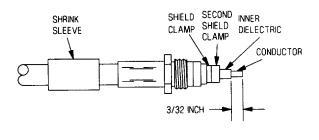
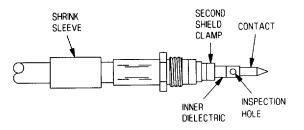


Figure 16. 82-5772, 82-5772-1, 82-5772-2, 82-5772-3, 82-5772-4 and 82-5772-5 Triaxial Connector Repair (Sheet 2)

NOTE

When soldering contact, conductor must be visible through inspection hole.

8. Using W60–3 soldering iron, solder contact to conductor (see paragraph 13).



9. Slide shrink sleeve over outer ferrule until it butts against clamp nut.

WARNING

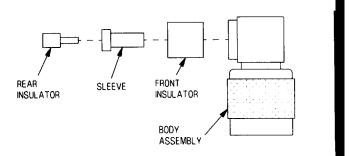
To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a badly ventilated area such as wheel wells, stand-up bays or crew stations can result in asphyxiation.

10. Shrink sleeve using heat tool and nitrogen servicing unit.

Change 3

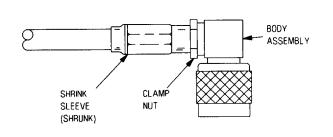
11. Slide front insulator, sleeve, and rear insulator into connector body assembly if these pieces are not already assembled into the body assembly of the connector.



CAUTION

Do not allow body assembly to rotate on cable while tightening clamp nut. Rotate body assembly only when assembled.

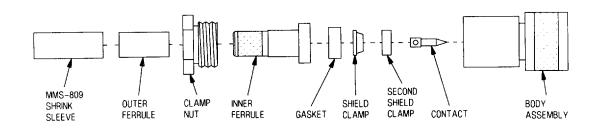
12. Slide body assembly over contact/cable assembly. While holding body assembly stationary, engage clamp nut to connector body assembly, tighten clamp nut finger tight. Torque clamp nut, using BT–ST–751 torque wrench, to 43 inch–pounds.



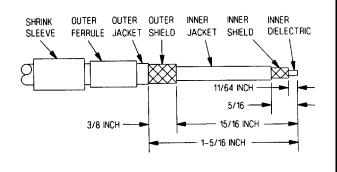


To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

1. Parts and assembly sequence.



2. Using 45-123 wire cutters, cut end of cable square. Cut a section of MMS-809 sleeving approximately 3/8-inch longer than outer ferrule. Slide MMS-809 shrink sleeve and outer ferrule over cable. Adjust cable stripper 45-163 for cable with 3/8-inch between blades (see paragraph 5). Strip outer jacket 1-5/16 inch and outer shield 15/16-inch. Strip inner jacket 5/16-inch and inner dielectric 11/64-inch.



3. Flare outer shield. Place inner ferrule into clamp nut. Slide clamp nut/inner ferrule over inner jacket and under outer shield until shield butts against clamp nut and end of ferrule is stopped by the cable jacket.

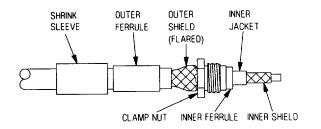
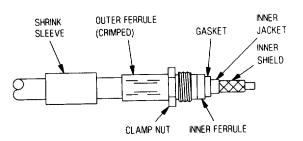


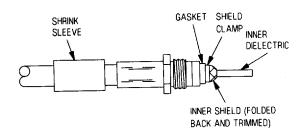
Figure 17. 82-5773, 82-5773-1, 82-5773-3 and 82-5773-5 Triaxial Connector Repair (Sheet 1)

Change 3

4. Slide outer ferrule forward over shield and against back of clamp nut. Using M22520/05–19 die set and M22520/5–01 crimp tool, crimp outer ferrule in the "A" cavity of die set. Slide crimp tool back toward cable, rotate crimp tool 45 degrees, and double crimp ferrule in order to crimp down on as much jacket as possible for improved strain relief (see paragraph 14). Slide gasket over inner jacket and against inner ferrule.



5. Slide shield clamp over inner jacket with flat side against gasket. Fold shield back and trim even with edge of shield clamp.



6. Slide second shield clamp over inner dielectric, inner shield and against first shield clamp.



To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

7. Using a sharp knife, remove inner dielectric so that 3/32-inch of conductor is exposed. Using W60-3 soldering iron, tin center conductor (see paragraph 12).

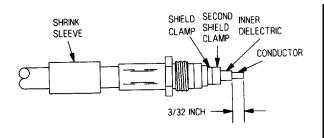
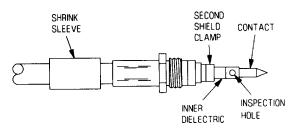


Figure 17. 82-5773, 82-5773-1, 82-5773-3 and 82-5773-5 Triaxial Connector Repair (Sheet 2)

NOTE

When soldering contact, conductor must be visible through inspection hole.

8. Using W60–3 soldering iron, solder contact to conductor (see paragraph 13).



9. Slide shrink sleeve over outer ferrule until it butts against clamp nut.

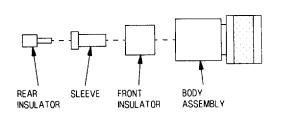
WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a badly ventilated area such as wheel wells, stand-up bays or crew stations can result in asphyxiation.

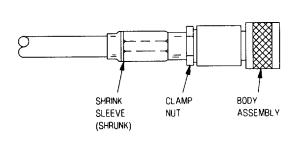
10. Shrink sleeve using heat tool and nitrogen servicing unit.

11. Slide front insulator, sleeve and rear insulator into connector body assembly if these pieces are not already assembled into body assembly connector.



Do not allow body assembly to rotate on cable while tightening clamp nut.

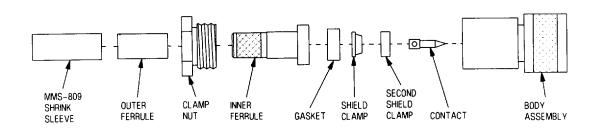
12. Slide body assembly over contact/cable assembly. While holding body assembly stationary, engage clamp nut to connector body assembly, tighten clamp nut finger tight. Torque clamp nut, using BT-ST-751 torque wrench, to 43 inch-pounds.



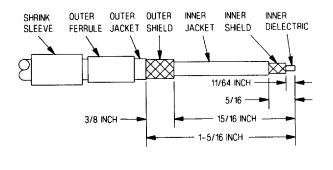


To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

1. Parts and assembly sequence.



2. Using 45-123 wire cutters, cut end of cable square. Cut a section of MMS-809 shrink sleeving approximately 3/8-inch longer than outer ferrule. Slide MMS-809 shrink sleeve and outer ferrule over cable. Adjust cable stripper 45-163 for cable with 3/8-inch between blades (see paragraph 5). Strip outer jacket 1-5/16 inch and outer shield 15/16-inch. Strip inner jacket 5/16-inch and inner dielectric 11/64-inch.



3. Flare outer shield. Place inner ferrule into clamp nut. Slide clamp nut/inner ferrule over inner jacket and under outer shield until the end of the ferrule is stopped by the cable jacket.

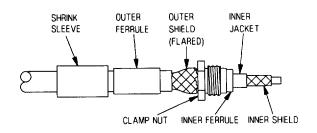
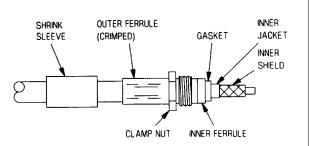
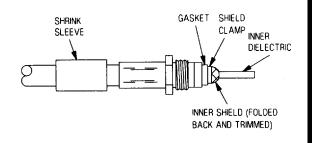


Figure 18. 82-5967, 82-5967-1, 82-5967-3 and 82-5967-5 Triaxial Connector Repair (Sheet 1)

4. Slide outer ferrule forward over shield and against back of clamp nut. Using M22520/05–19 die set and M22520/5–01 crimp tool, crimp outer ferrule in the "A" cavity of die set. Slide crimp tool back toward the cable, rotate crimp tool 45 degrees, and double crimp ferrule in order to crimp down on as much jacket as possible to improve strain relief (see paragraph 14). Slide gasket over inner jacket and against inner ferrule.



5. Slide shield clamp over inner jacket with flat side against gasket. Fold shield back, comb and trim inner shield even with edge of shield clamp.



6. Slide second shield clamp over inner dielectric, inner shield and against first shield clamp.



To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

7. Using a sharp knife, remove inner dielectric so that 3/32-inch of conductor is exposed. Using W60-3 soldering iron, tin center conductor (see paragraph 12).

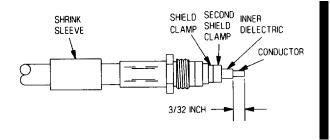
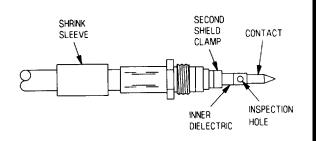


Figure 18. 82-5967, 82-5967-1, 82-5967-3 and 82-5967-5 Triaxial Connector Repair (Sheet 2)

NOTE

When soldering contact, conductor must be visible through inspection hole.

8. Using W60–3 soldering iron, solder contact to conductor. Conductor must be visible through inspecton hole (see paragraph 13).



9. Slide shrink sleeve over outer ferrule until it butts against clamp nut.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

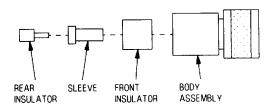
Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a badly ventilated area such as wheel wells, stand-up bays or crew stations can result in asphyxiation.

10. Shrink sleeve using heat tool and nitrogen servicing unit.

Change 3

124 00 Page 25/(26 blank)

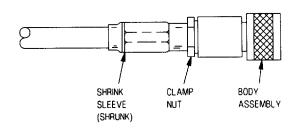
11. Slide front insulator, sleeve and rear insulator into connector body assembly if these pieces are not already assembled into body assembly connector.





Do not allow body assembly to rotate on cable while tightening clamp nut.

12. Slide body assembly over contact/cable assembly. While holding body assembly stationary, engage clamp nut to connector body assembly, tighten clamp nut finger tight. Torque clamp nut, using BT–ST–751 torque wrench, to 43 inch–pounds.



1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

M39012/XX-XXXX (MIL-C-39012) SC TYPE COAX CONNECTOR REPAIR

Reference Material

Electrical System	F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	3AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No.
Coaxial Cable Strippers 45-163 and 45-164 Adjustment and Use	3
Depth of Cut Adjustment	3
Distance Adjustment	3
Use	4
Contact Crimping, Figure 10	8
Crimping Operation, Figure 6	5
Crimp Tool Handle M22520/1-01 Assembly, Adjustments, and Use	7
Adjusting Turret Head	8
Contact Crimping	8
Removal and Installation of Turret Head	7
Setting Selector Knob	8
Crimp Tool M22520/5-01 Assembly and Use	5
Crimp Procedure	5
Die Installation	5
Die Removal	6
Description	2
Die Installation, Figure 5	5
Distance Adjustment, Figure 1	3
Jacket Cut Adjustment, Figure 2	3
Lower Die Removal, Figure 8	6
Materials Required	2
M22520/1-01 Crimp Tool Handle and Turret Head, Figure 9	7
M39012/39-0501 Coaxial Connector Repair, Figure 11	9
M39012/39-0503 Coaxial Connector Repair, Figure 12	11
Operation, Figure 4	4
Procedure	2
Reference Designation to Figure Number Index	2
Shield Cut Adjustment, Figure 3	4
Support Equipment Required	2

Alphabetical Index (Continued)

Subject	Page No
Upper Die Removal, Figure 7	6

Record of Applicable Technical Directives

None

Number Index Reference Designation Figure No.

Reference Designation to Figure

69P-R006 11 76P-B011B 12 76P-F012B 11 76P-R013B 11

1. DESCRIPTION.

2. These connectors are right angle, SC-type. They are not repairable.

Support Equipment Required

Nomenclature
Heat Tool
Repair Set - Wire and
Connector
Nitrogen Servicing
Unit - NAN-3

Materials Required

Specification or Part Number	Nomenclature	
MS23053/5-XXX-0	Shrink Sleeve	
3. PROCEDURE.		
500000000		



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table for correct figure.

5. COAXIAL CABLE STRIPPERS 45-163 AND 45-164 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

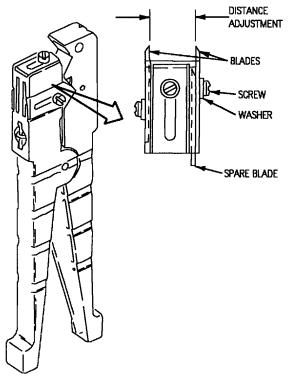
6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting two spare blades will change distance between blades 3/64 inch.

- c. Install screws and tighten finger tight.
- d. Adjust depth of cut.



F/A-18-WRM-(409-2)01-SCAN

Figure 1. Distance Adjustment

7. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.

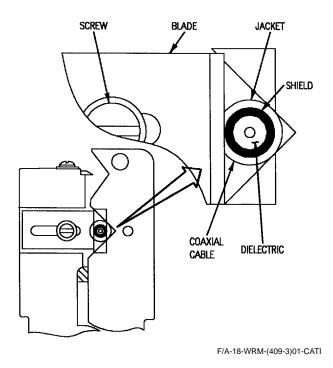


Figure 2. Jacket Cut Adjustment

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

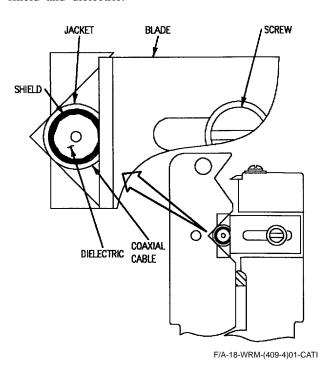


Figure 3. Shield Cut Adjustment

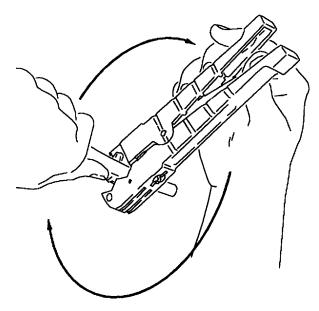
8. USE.

a. Position stripper on cable so that blades face down. See figure 4.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.



F/A-18-WRM-(409-1)01-SCAN

Figure 4. Operation

- c. Remove stripper from cable.
- d. Remove stripped jacket and shield.

9. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

10. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 5.
- b. Close handle to make sure dies are seated and locked in place.

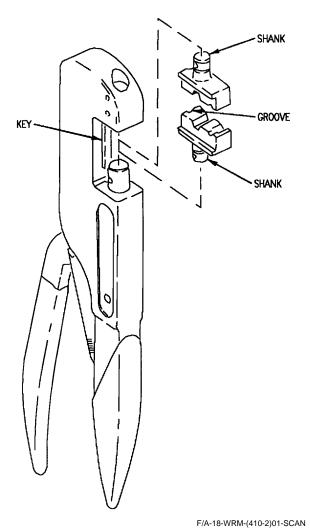


Figure 5. Die Installation

11. CRIMP PROCEDURE.

- a. Position crimping material in correct cavity dies. See figure 6.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

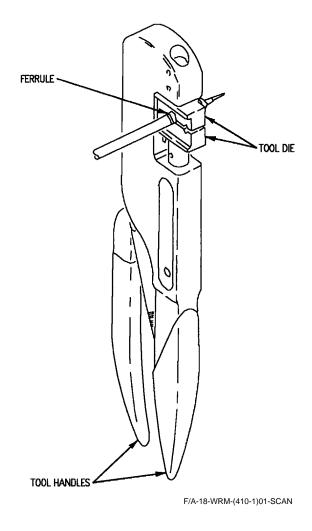


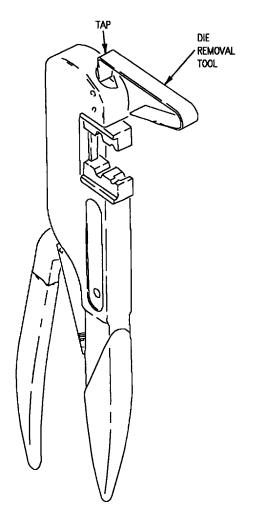
Figure 6. Crimping Operation

12. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 7.



F/A-18-WRM-(410-3)01-SCAN

Figure 7. Upper Die Removal

- b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.
- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 8.

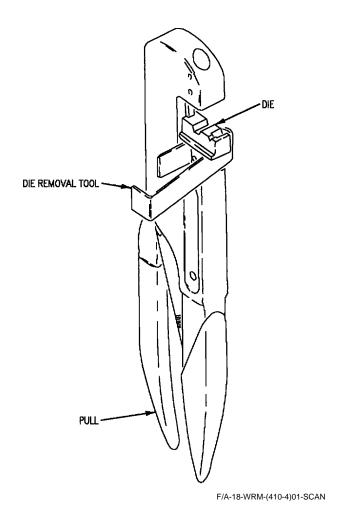


Figure 8. Lower Die Removal

d. Pull handle open with a snap action. The die will be released from the lock spring and can then be removed by hand.

13. CRIMP TOOL HANDLE M22520/1-01 ASSEMBLY, ADJUSTMENTS, AND USE.

NOTE

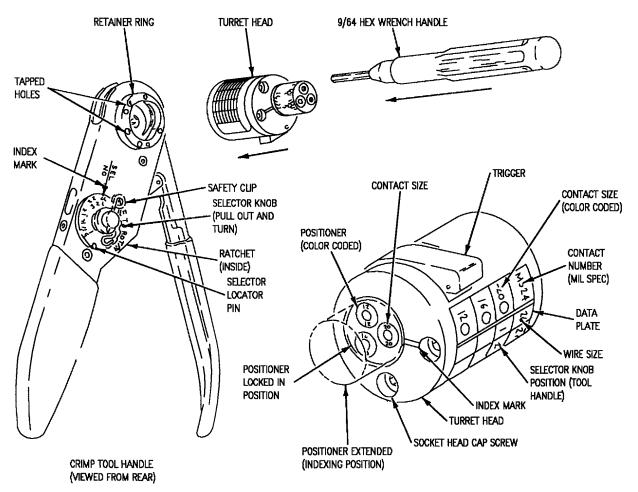
Make sure crimp tool is operating correctly by using M22520/3-1 inspection gage.

14. REMOVAL AND INSTALLATION OF TURRET HEAD.

NOTE

Crimp tool handle shall be fully open when inserting turret of positioner head and when changing selector position.

- a. Press trigger of turret head releasing positioner to extended (indexing) position. See figure 9.
- b. Seat turret head onto retaining ring on back of tool with socket head cap screws lined up with tapped holes.
- c. Tighten socket head screws with a 9/64-inch hex wrench.
- d. To remove, loosen socket head screw until threads are disengaged from tapped holes and lift off crimp tool.



F/A-18-WRM-(405-1)01-SCAN

Figure 9. M22520/1-01 Crimp Tool Handle and Turret Head

15. ADJUSTING TURRET HEAD.

- a. Press trigger on turret head, releasing positioner to extended (indexing) position.
- b. Rotate positioners until color coded positioner is lined up with index mark.
- c. Press positioner into turret head until it snaps into locked position.

16. SETTING SELECTOR KNOB.

- a. Remove the safety clip lock from selector knob.
- b. Raise selector knob and rotate to selector number found on data plate.
 - c. Replace safety clip.

17. CONTACT CRIMPING.

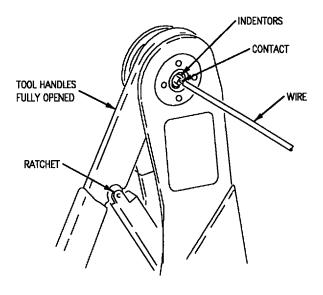
a. Insert contact and coax into crimp tool indentors on front of tool until contact bottoms in positioner/turret. (See figure 10, detail A).

NOTE

Crimp tool will not release until crimping cycle is completed.

b. Hold coax in place and squeeze tool handles together smoothly until ratchet releases and tool opens. (See figure 10, detail B).

c. Remove crimped contact from tool and inspect crimp.



CRIMP TOOL HANDLE (MEWED FROM FRONT)

DETAIL A

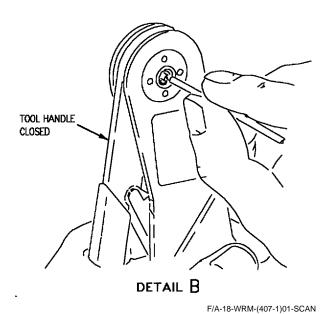
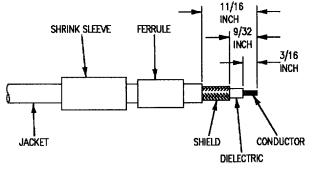


Figure 10. Contact Crimping

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

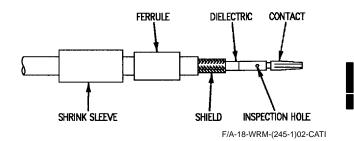
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-164 for cable with 13/32-inch between blades (see paragraph 5). Strip cable jacket 11/16-inch and shield 9/32-inch. Using sharp knife remove 3/16-inch of dielectric.

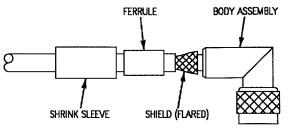


F/A-18-WRM-(148-1)02-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using turret head M22520/1-13 adjusted to the blue position and M22520/1-01 crimping tool frame, crimp contact with selector knob set to "8" (see paragraph 13).



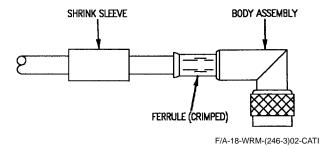
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(248-2)02-CATI

Figure 11. M39012/39-0501 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-25 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 9).



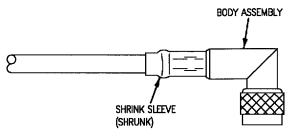
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.

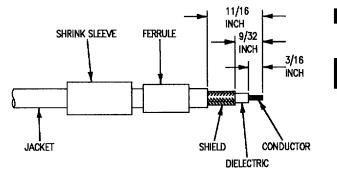


F/A-18-WRM-(246-4)02-CATI

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

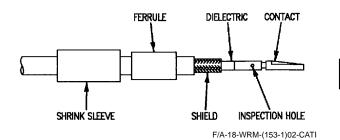
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-163 for cable with 13/32-inch between blades (see paragraph 5). Strip cable jacket 11/16-inch and shield 9/32-inch. Using sharp knife remove 3/16-inch of dielectric.

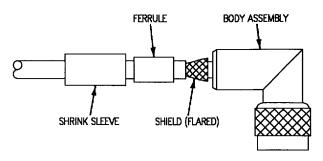


F/A-18-WRM-(148-1)02-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using turret heat M22520/1-13 adjusted to the blue position and the M22520/1-01 crimping tool frame with selector knob set to "7", crimp contact (see paragraph 13).



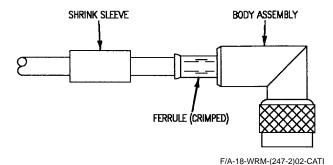
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(247-1)02-CATI

Figure 12. M39012/39-0503 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-05 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 9).



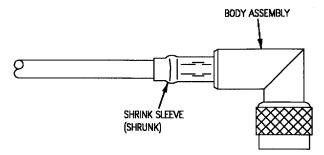
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.



F/A-18-WRM-(247-3)02-CATI

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA

M39012/XX-XXXX (MIL-C-39012) SMA TYPE COAX CONNECTOR REPAIR

Reference Material

Electrical System	A-F18A	C-420-300
Utility Battery and Charger Unit or Utility Battery		WP019 00
Emergency Battery and Charger Unit or Emergency Battery		WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A-F18AC-	WRM-000
Stripping Tools		WP010 00

Alphabetical Index

Subject	Page No.
Coaxial Cable Strippers 45-163 Adjustment and Use	3
Depth of Cut Adjustment	4
Distance Adjustment	3
Use	5
Contact Crimping, Figure 15	11
Crimp Tool Handle M22520/1-01 Assembly, Adjustment, and Use	10
Adjusting Turret Head	11
Contact Crimping	11
Removal and Installation of Turret Head	10
Setting Selector Knob	11
Crimp Tool M22520/5-01 Assembly and Use	7
Crimp Procedure	8
Die Installation	7
Die Removal	8
Crimping Operation, Figure 11	8
Description	2
Die Installation, Figure 10	7
Distance Adjustment, Figure 1	3
Filling Solder Cup, Figure 7	6
Jacket Cut Adjustment, Figure 2	4
Lower Die Removal, Figure 13	9
Materials Required	2
M22520/1-01 Crimp Tool Handle and Turret Head, Figure 14	10
M39012/55-4026 Coaxial Connector Repair, Figure 18	16
M39012/55-4502 Coaxial Connector Repair, Figure 16	12
M39012/56-4502 Coaxial Connector Repair, Figure 17	14
Operation, Figure 4	5
Procedure	2
Reference Designation to Figure Number Index	2

Alphabetical Index (Continued)

Subject	Page No
Shield Cut Adjustment, Figure 3	4
Soldering	5
Soldering Contact to Center Conductor	6
Tinning Center Conductor	5
Soldering Contact to Center Conductor, Figure 8	6
Support Equipment Required	2
Tinning Center Conductor, Figure 5	5
Unacceptable Conditions After Soldering Contact, Figure 9	7
Unacceptable Conditions After Tinning, Figure 6	6
Upper Die Removal, Figure 12	8

Record of Applicable Technical Directives

None

Reference Designation to Figure **Number Index**

Reference Designation	Figure No.
67P-T001E	18
74P-B001B	17
74P-B001C	17
74P-F002D	16
74P-F002F	16

1. **DESCRIPTION.**

2. These connectors are SMA type and are not repairable.

Support Equipment Required

Nomenclature
Heat Tool
Repair Set - Wire and
Connector
Nitrogen Servicing
Unit - NAN-3

Materials Required

Specification or Part Number	Nomenclature	
MS23053/5-XXX-0	Shrink Sleeve	
3. PROCEDURE.		
CAUTION		



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table for correct figure.

5. COAXIAL CABLE STRIPPERS 45-163 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

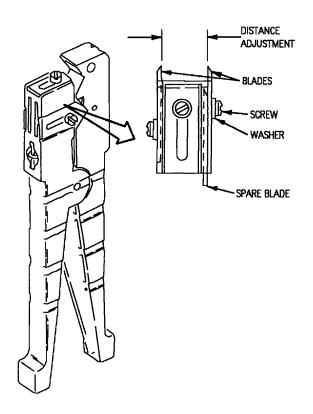
6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting two spare blades will change distance between blades 3/64-inch.

- c. Install screws and tighten finger tight.
- d. Adjust depth of cut.



F/A-18-WRM-(409-2)01-SCAN

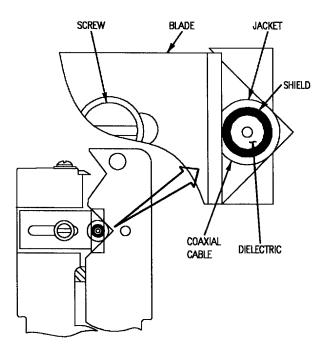
Figure 1. Distance Adjustment

7. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.



F/A-18-WRM-(409-3)01-CATI

Figure 2. Jacket Cut Adjustment

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

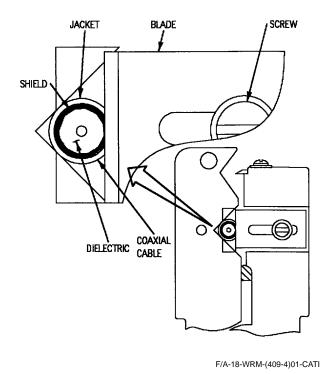


Figure 3. Shield Cut Adjustment

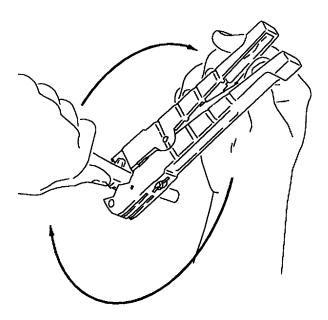
8. USE.

a. Position stripper on cable so that blades face down. See figure 4.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.



F/A-18-WRM-(409-1)01-SCAN

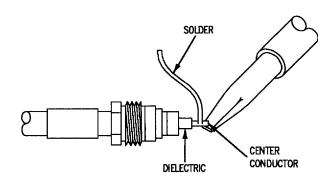
Figure 4. Operation

9. SOLDERING.

10. Soldering provides a mechanical and electrical bond between metallic components. To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

11. TINNING CENTER CONDUCTOR.

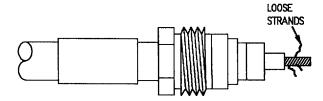
- a. Clean and tin soldering iron.
- b. Make sure center conductor wires are twisted together in the same direction as the lay of wire.
- c. Apply heat until solder flows into conductor. Remove heat when solder flows into center conductor. Apply only enough solder to join wires together. Individual wires should be coated with solder yet their shape visible. See figure 5.

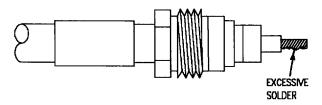


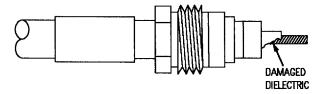
F/A-18-WRM-(572-1)01-CATI

Figure 5. Tinning Center Conductor

- d. The below conditions are unacceptable: See figure 6.
 - (1) Individual wires not joined to center conductor.
 - (2) Excessive solder.
 - (3) Damaged dielectric.







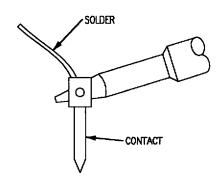
F/A-18-WRM-(573-1)01-CATI

Figure 6. Unacceptable Conditions
After Tinning

12. SOLDERING CONTACT TO CENTER CONDUCTOR.

a. Clean and tin soldering iron.

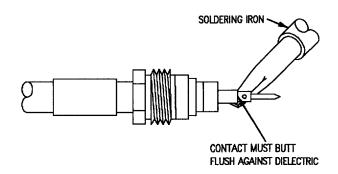
b. Apply heat to contact solder cup and fill cup with solder. Avoid getting solder on outside of contact. See figure 7.



F/A-18-WRM-(574-1)01-CATI

Figure 7. Filling Solder Cup

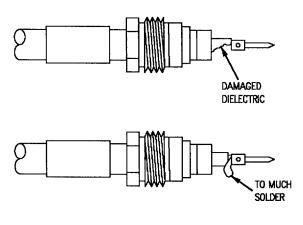
c. Position contact on center conductor and apply heat to solder cup. When solder melts, slide contact over center conductor. Remove heat as soon as solder flows between center conductor and contact. Hold cable and contact steady until solder hardens. See figure 8.



F/A-18-WRM-(575-1)01-CATI

Figure 8. Soldering Contact to Center Conductor

- d. Inspect solder joint. Solder should be shiny and flow smoothly from center conductor to contact. See figure 9. The below conditions are unacceptable:
 - (1) Damaged dielectric.
 - (2) Too much solder.



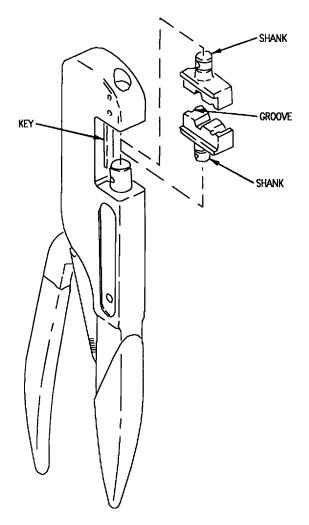
F/A-18-WRM-(576-1)01-CATI

Figure 9. Unacceptable Conditions
After Soldering Contact

13. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

14. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 10.
- b. Close handle to make sure dies are seated and locked in place.



F/A-18-WRM-(410-2)01-SCAN

Figure 10. Die Installation

15. CRIMP PROCEDURE.

- a. Position crimping material in correct cavity of dies. See figure 11.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

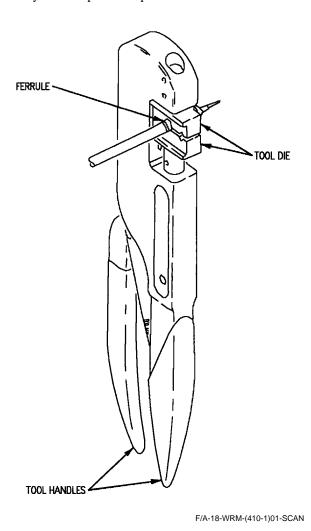


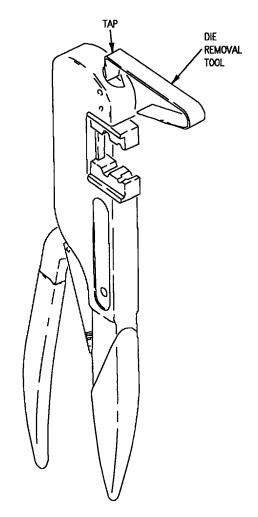
Figure 11. Crimping Operation

16. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 12.



F/A-18-WRM-(410-3)01-SCAN

Figure 12. Upper Die Removal

b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.

- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See Figure 13.
- d. Pull handle open with a snap action. The die will be released from the lock spring and can then be removed by hand.

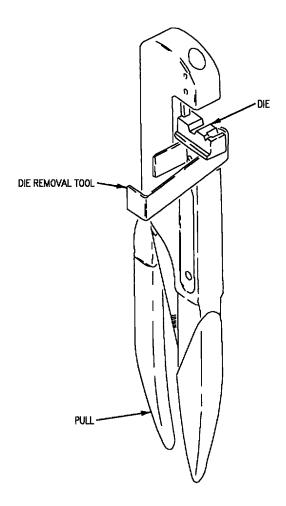


Figure 13. Lower Die Removal

F/A-18-WRM-(410-4)01-SCAN

7. CRIMP TOOL HANDLE M22520/1-01 ASSEMBLY, ADJUSTMENTS, AND USE.

NOTE

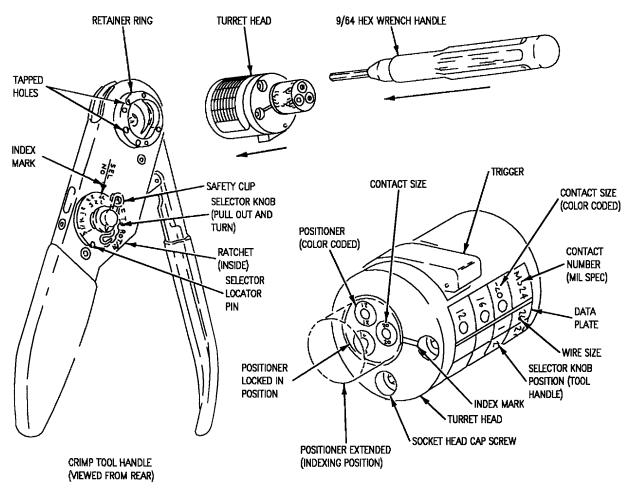
Make sure crimp tool is operating correctly by using M22520/3-1 inspection gage.

18. REMOVAL AND INSTALLATION OF TURRET HEAD.

NOTE

Crimp tool handle shall be fully open when inserting turret of positioner head and when changing selector position.

- a. Press trigger of turret head releasing positioner to extended (indexing) position. See figure 14.
- b. Seat turret head onto retaining ring on back of tool with socket head cap screws lined up with tapped holes.
- c. Tighten socket head screws with a 9/64-inch hex wrench.
- d. To remove, loosen socket head screw until threads are disengaged from tapped holes and lift off crimp tool.



F/A-18-WRM-(405-1)01-SCAN

Figure 14. M22520/1-01 Crimp Tool Handle and Turret Head

19. ADJUSTING TURRET HEAD.

- a. Press trigger on turret head, releasing positioner to extended (indexing) position.
- b. Rotate positioners until color coded positioner is lined up with index mark.
- c. Press positioner into turret head until it snaps into locked position.

20. SETTING SELECTOR KNOB.

- a. Remove the safety clip lock from selector knob.
- b. Raise selector knob and rotate to selector number found on data plate.
 - c. Replace safety clip.

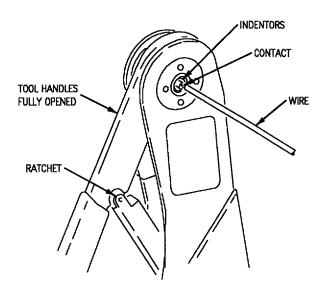
21. CONTACT CRIMPING.

a. Insert contact and coax into crimp tool indentors on front of tool until contact bottoms in positioner/turret. (See figure 15, detail A).

NOTE

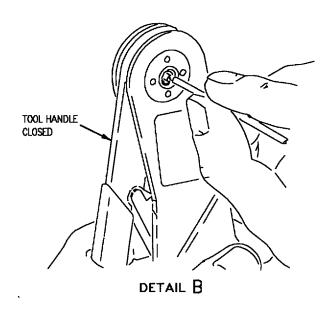
Crimp tool will not release until crimping cycle is completed.

b. Hold coax in place and squeeze tool handles together smoothly until ratchet releases and tool opens. (See figure 15, detail B).



CRIMP TOOL HANDLE (MEWED FROM FRONT)

DETAIL A



F/A-18-WRM-(407-1)01-SCAN

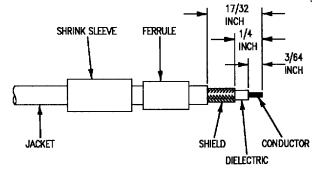
Figure 15. Contact Crimping

c. Remove crimped contact from tool and inspect for correct crimp.

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

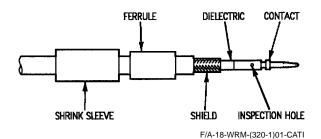
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

- 1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust
- cable stripper 45-163 for cable with 9/32-inch between blades (see paragraph 5). Strip cable jacket 17/32-inch and shield 1/4-inch. Using sharp knife, remove 9/64-inch of dielectric.

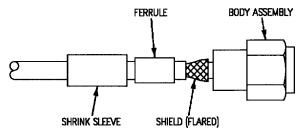


F/A-18-WRM-(244-1)02-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using turret head M22520/1-15 and the M22520/1-01 crimping tool frame with selector knob set to "3", crimp contact (see paragraph 17).



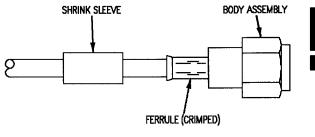
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(224-2)02-CATI

Figure 16. M39012/55-4502 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-19 die set and M22520/5-01 crimping tool frame, crimp ferrule in "B" cavity of die set (see paragraph 13).



F/A-18-WRM-(224-3)02-CATI

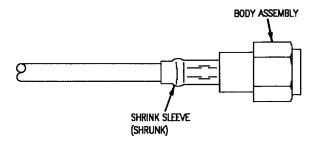
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, convention hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.

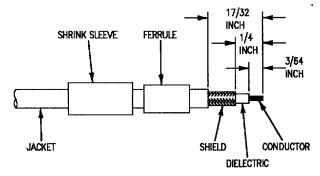


F/A-18-WRM-(224-4)02-CATI

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18Ac-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

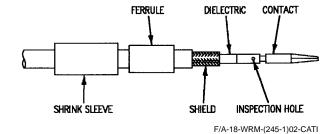
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-163 for cable with 9/32-inch between blades (see paragraph 5). Strip cable jacket 17/32-inch and shield 1/4-inch. Using sharp knife, remove 9/64-inch of dielectric.



F/A-18-WRM-(224-1)02-CATI

2. Slide contact over center conductor until it butts against dielectric. Center conductor must be visible through inspection hole in contact. Using turret head M22520/1-15 and the M22520/1-01 crimping tool frame with selector knob set to "3", crimp contact (see paragraph 17).



3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.

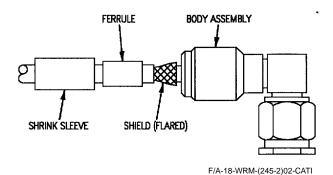
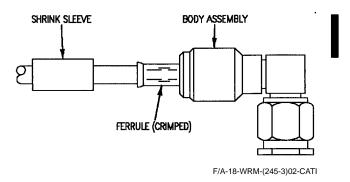


Figure 17. M39012/56-4502 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-19 die set and M22520/5-01 crimping tool frame, crimp ferrule in "B" cavity of die set (see paragraph 13).



5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.

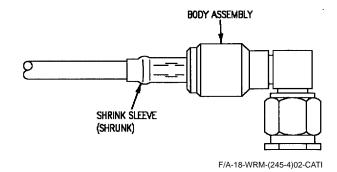
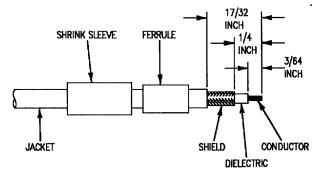


Figure 17. M39012/56-4502 Coaxial Connector Repair (Sheet 2)

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

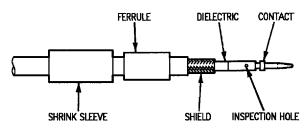
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-163 for cable with 9/32-inch between blades (see paragraph 5). Strip cable jacket 17/32-inch and shield 1/4-inch. Using sharp knife, remove 9/64-inch of dielectric. Tin center conductor using W60-3 soldering iron (see paragraph 11).



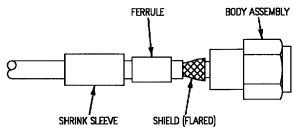
F/A-18-WRM-(244-1)02-CATI

2. Slide contact over center conductor until it butts against dielectric. Solder contact to conductor using W60-3 soldering iron (see paragraph 12).



F/A-18-WRM-(320-1)01-CATI

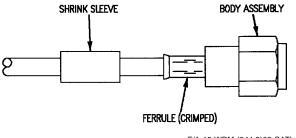
3. Flare shield. Slide body assembly over contact and under shield until it seats. A snap will be felt when contact is fully seated. The body assembly must butt against the dielectric. Pull lightly on cable to make sure body assembly is fully seated.



F/A-18-WRM-(244-2)02-CATI

Figure 18. M39012/55-4026 Coaxial Connector Repair (Sheet 1)

4. Slide ferrule over shield until it butts against body assembly. Using M22520/5-35 die set and M22520/5-01 crimping tool frame, crimp ferrule in "B" cavity of die set (see paragraph 13).



F/A-18-WRM-(244-3)02-CATI

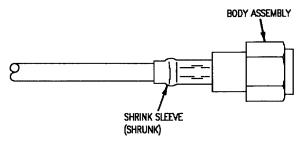
5. Slide shrink sleeve over ferrule until it butts against body assembly.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

6. Shrink sleeve using heat tool and nitrogen servicing unit.



F/A-18-WRM-(244-4)02-CATI

Figure 18. M39012/55-4026 Coaxial Connector Repair (Sheet 2)

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA

M25516/XX-XX-XX (MIL-C-25516) COAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No
Coaxial Cable Strippers 45-164 Adjustment and Use	3
Depth of Cut Adjustment	3
Use	3
Description	2
Filling Solder Cup, Figure 5	5
Jacket Cut Adjustment, Figure 1	3
Materials Required	2
M25516/19-02-04, M25516/19-03-04 and M25516/19-10-04 Coax Connector Repair, Figure 10	12
M25516/19-04-14 Coax Connector Repair, Figure 9	9
M25516/20-02-04, M25516/20-03-04, and M25516/20-10-04 Coax Connector Repair, Figure 8	6
Operation, Figure 2	3
Procedure	2
Reference Designation to Figure Number Index	2
Soldering	3
Soldering Contact to Center Conductor	5
Tinning Center Conductor	4
Soldering Contact to Center Conductor, Figure 6	5
Support Equipment Required	2
Tinning Center Conductor, Figure 3	4
Unacceptable Conditions After Soldering Contact, Figure 7	5
Unacceptable Conditions After Tinning, Figure 4	4

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

Reference Designation	Figure No.
15J-K006	10
15J-K007	10
15P-E003A	8
15P-E003B	8
66J-C004	9
72J-B009	9

1. DESCRIPTION.

2. The M25516 coax connectors are used in fuel gaging systems and therefore require careful assembly to assure complete liquid tight sealing and continuity.

Support Equipment Required

Part Number or Type Designation

Nomenclature

3308AS100

Repair Set - Wire and Connector

Materials Required

Specification

or Part Number Nomenclature

SN60WRMAP2-0-040 Solder

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table in this WP for correct figure.

5. COAXIAL CABLE STRIPPERS 45-164 ADJUSTMENT AND USE.

NOTE

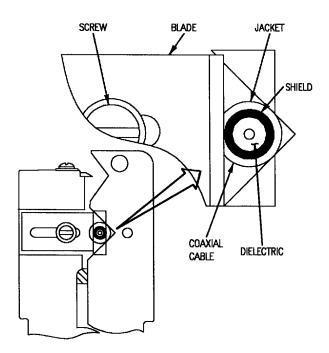
For detailed operation of coaxial wire strippers see WP010 00.

6. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 1.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.



F/A-18-WRM-(409-3)01-CATI

Figure 1. Jacket Cut Adjustment

- c. Adjust other blade so blade does not touch cable.
- d. If necessary, repeat steps 6a through 6c until blade cuts through jacket without damaging shield.

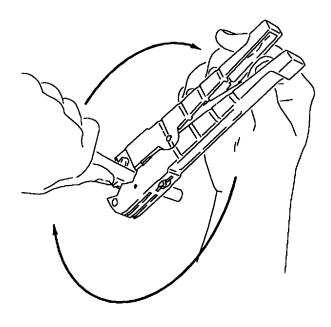
7. **USE.**

a. Position stripper on cable so that blades face down. See figure 2.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket.



F/A-18-WRM-(409-1)01-SCAN

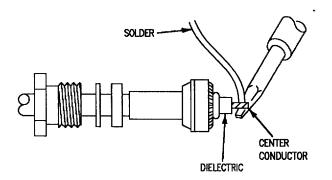
Figure 2. Operation

8. SOLDERING.

9. Soldering provides a mechanical and electrical bond between metallic components. To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

10. TINNING CENTER CONDUCTOR.

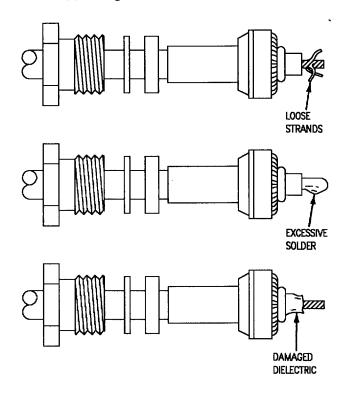
- a. Clean and tin soldering iron.
- b. Make sure center conductor wires are twisted together in the same direction as the lay of wire.
- c. Apply heat and solder to center conductor. Remove heat when solder flows into center conductor. Apply only enough solder to join wires together. Individual wires should be coated with solder yet their shape visible. See figure 3.



F/A-18-WRM-(880-1)02-CATI

Figure 3. Thinning Center Conductor

- d. The below conditions are unacceptable: See figure 4.
 - (1) Individual wires not joined to center conductor.
 - (2) Excessive solder.
 - (3) Damaged dielectric.

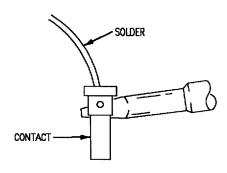


F/A-18-WRM-(880-2)02-CATI

Figure 4. Unacceptable Conditions
After Tinning

11. SOLDERING CONTACT TO CENTER CONDUCTOR.

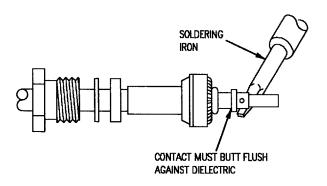
- a. Clean and tin soldering iron.
- b. Apply heat to contact solder cup and fill cup half full with solder. Avoid getting solder on outside of contact. See figure 5.



F/A-18-WRM-(880-3)02-CATI

Figure 5. Filling Solder Cup

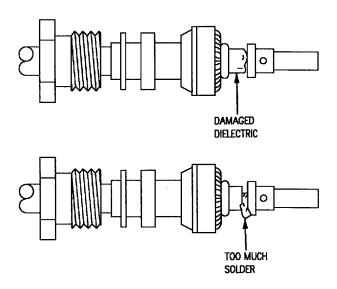
c. Position contact on center conductor and apply heat to solder cup. When solder melts, slide contact over center conductor. Remove heat as soon as solder flows between center conductor and contact. Hold cable and contact steady until solder hardens. See figure 6.



F/A-18-WRM-(880-4)02-CATI

Figure 6. Soldering Contact to Center Conductor

- d. Inspect solder joint. Solder should be shiny and flow smoothly from center conductor to contact. The below conditions are unacceptable. See figure 7.
 - (1) Damaged dielectric.
 - (2) Too much solder.

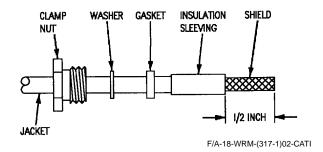


F/A-18-WRM-(880-5)02-CATI

Figure 7. Unacceptable Conditions
After Soldering Contact

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- 1. Using 45-123 wire cutters, cut end of cable square. Slide clamp nut, washer, gasket and insulation sleeving
- over cable. Grooved end of gasket must face end of cable. Using coaxial stripper 45-163 adjusted for cable, remove 1/2-inch of jacket. See paragraph 5.

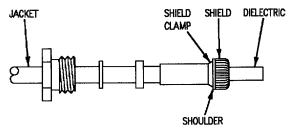


2. Slide shield clamp, with tapered end towards gasket, over shield and against jacket.

NOTE

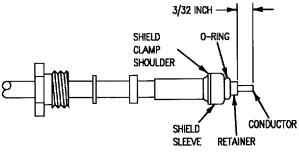
Shield strands muse be smoothly and evenly distributed around face of shield clamp.

3. Comb and flare out shield. Fold shield over shield clamp and trim even with shoulder of shield clamp.



F/A-18-WRM-(317-2)02-CATI

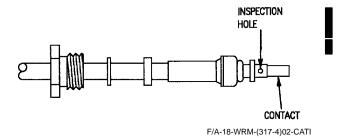
4. Slide shield sleeve over shield and against shoulder of shield clamp. Slide O-ring and retainer over dielectric. Using sharp knife, trim dielectric flush with retain er. Cut conductor 3/32-inch beyond retainer.



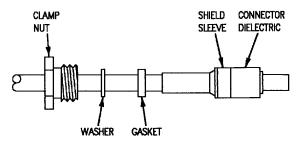
F/A-18-WRM-(317-3)02-CATI

Figure 8. M25516/20-02-04, M25516/20-02-04 and M25516/20-10-04 Coax Connector Repair (Sheet 1)

5. Using W60-3 soldering iron, tin center conductor. See paragraph 10. Using W60-3 soldering iron, solder contact to center conductor. See paragraph 11.



6. Slide connector dielectric over contact and against shield sleeve.



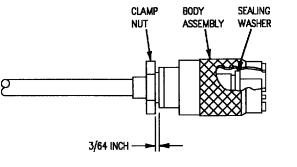
F/A-18-WRM-(317-5)02-CATI

7. Slide body assembly over connector dielectric until it stops. Slide gasket, washer, and clamp nut into body assembly. Make sure groove in gasket goes over beveled edge of shield clamp.



Do not allow body assembly to rotate on cable while tightening clamp nut.

- 8. While supporting body assembly, torque clamp nut, using BT-ST-751 Torque Wrench, to 4 to 6 inchpounds.
 - 9. From front of body assembly, slide sealing washer over connector dielectric until it stops.

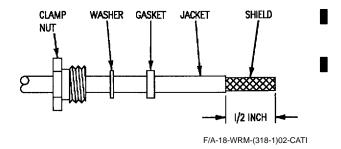


F/A-18-WRM-(317-6)02-CATI

Figure 8. M25516/20-02-04, M25516/20-03-04 and M25516/20-10-04 Coax Connector Repair (Sheet 3)

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

1. Using 45-123 wire cutters, cut end of cable square. Slide clamp nut, washer, and gasket over cable. Grooved end of gasket must face end of cable. Using coaxial stripper 45-163 adjusted for cable, remove 1/2-inch of jacket. See paragraph 5.

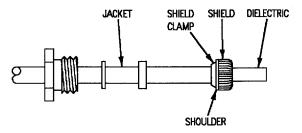


2. Slide shield clamp, with tapered end towards gasket, over shield and against jacket.

NOTE

Shield strands must be smoothly and evenly distributed around face of shield clamp.

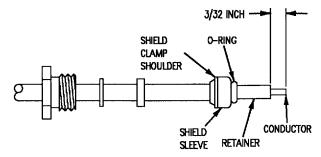
3. Comb and flare out shield. Fold shield over shield clamp and trim even with shoulder of shield clamp.



F/A-18-WRM-(318-2)02-CATI

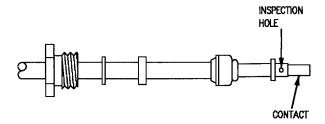
Figure 9. M25516/19-04-14 Coax Connector Repair (Sheet 1)

4. Slide shield sleeve over shield and against shoulder of shield clamp. Slide O-ring and retainer over dielectric. Using sharp knife, trim dielectric flush with retain er. Cut conductor 3/32-inch beyond retainer.



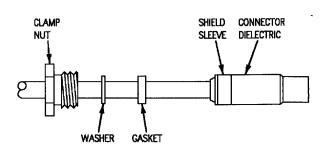
F/A-18-WRM-(318-3)02-CATI

5. Using W60-3 soldering iron, tin center conductor. See paragraph 10. Using W60-3 soldering iron, solder contact to center conductor. See paragraph 11.



F/A-18-WRM-(318-4)02-CATI

6. Slide connector dielectric over contact and against shield sleeve.



F/A-18-WRM-(318-5)02-CATI

Figure 9. M25516/19-04-14 Coax Connector Repair (Sheet 2)

7. Slide body assembly over connector dielectric until it stops. Slide gasket, washer, and clamp nut into body assembly. Make sure groove in gasket goes over beveled edge of shield clamp.



Do not allow body assembly to rotate on cable while tightening clamp nut.

8. While supporting body assembly, screw clamp nut into body assembly. Using torque wrench, torque clamp nut to 4 to 6 inch-pounds.

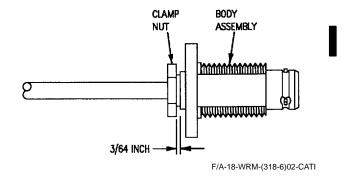
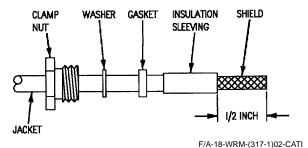


Figure 9. M25516/19-04-14 Coax Connector Repair (Sheet 3)

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- 1. Using 45-123 wire cutters, cut end of cable square. Slide clamp nut, washer, gasket and insulation sleeving over cable. Grooved end of gasket must face end of
- cable. Using coaxial stripper 45-163 adjusted for cable, remove 1/2-inch of jacket. See paragraph 5.

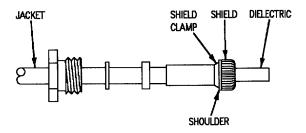


2. Slide shield clamp, with tapered end towards gasket, over shield and against jacket.

NOTE

Shield strands must be smoothly and evenly distributed around face of shield clamp.

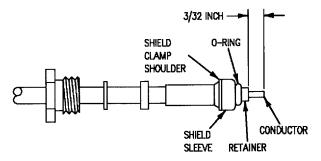
3. Comb and flare out shield. Fold shield over shield clamp and trim even with shoulder of shield clamp.



F/A-18-WRM-(317-2)02-CATI

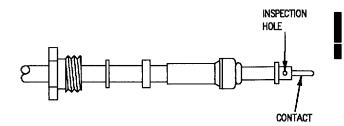
Figure 10. M25516-19-02-04, M25516-19-03-04 and M25516-19-10-04 Coax Connector Repair (Sheet 1)

4. Slide shield sleeve over shield and against shoulder of shield clamp. Slide O-ring and retainer over dielectric. Using sharp knife, trim dielectric flush with retain er. Cut conductor 3/32-inch beyond retainer.



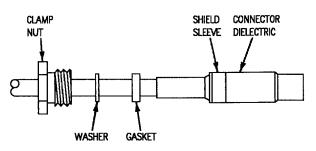
F/A-18-WRM-(317-3)02-CATI

5. Using W60-3 soldering iron, tin center conductor. See paragraph 10. Using W60-3 soldering iron, solder contact to center conductor. See paragraph 11.



F/A-18-WRM-(319-1)02-CATI

6. Slide connector dielectric over contact and against shield sleeve.



F/A-18-WRM-(319-2)02-CATI

7. Slide body assembly over connector dielectric until it stops. Slide gasket, washer and clamp nut into body assembly. Make sure groove in gasket goes over beveled edge of shield clamp.



Do not allow body assembly to rotate on cable while tightening clamp nut.

8. While holding body assembly, screw clamp nut into body assembly. Using torque wrench, torque clamp nut to 4 to 6 inch-pounds.

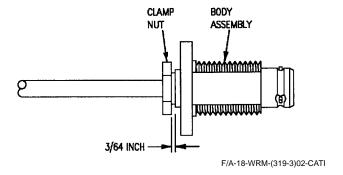


Figure 10. M25516-19-02-04, M25516-19-03-04 and M25516-19-10-04 Coax Connector Repair (Sheet 3)

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA

1211-XX and 1212-XX (MIL-C-25516) COAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No.
Coaxial Cable Strippers 45-164 Adjustment and Use	3
Depth of Cut Adjustment	3
Use	3
Description	2
Filling Solder Cup, Figure 5	5
Jacket Cut Adjustment, Figure 1	3
Materials Required	2
Operation, Figure 2	3
Procedure	2
Reference Designation to Figure Number Index	2
Soldering	4
Soldering Contact to Center Conductor	5
Tinning Center Conductor	4
Soldering Contact to Center Conductor, Figure 6	5
Support Equipment Required	2
Tinning Center Conductor, Figure 3	4
Unacceptable Conditions After Soldering Contact, Figure 7	5
Unacceptable Conditions After Tinning, Figure 4	4
1211-422 Coax Connector Repair, Figure 8	6
1212-004 1212-204 and 1212-304 Coax Connector Repair Figure 9	9

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

Reference Designation	Figure No
15P-E006	9
15P-E007	9
66P-C004	8
72P-B009	8

1. DESCRIPTION.

2. The 1211-422, 1212-004, 1212-204 and 1212-304 are miniature coax connectors with a temperature range of -85 $^{\circ}$ to +257 $^{\circ}$ F.

Support Equipment Required

Part Number or

Type Designation Nomenclature

3308AS100 Repair Set - Wire and

Connector

Materials Required

Specification

or Part Number Nomenclature

SN60WRMAP2-0-040 Solder

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring

4. Refer to Reference Designation to Figure Number Index table in this WP for correct figure.

5. COAXIAL CABLE STRIPPERS 45-164 ADJUSTMENT AND USE.

NOTE

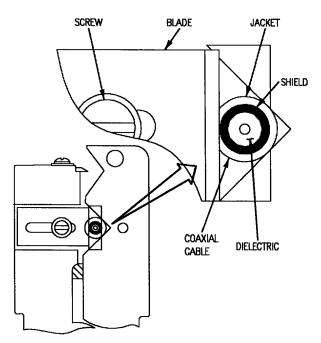
For detailed operation of coaxial wire strippers see WP010 00.

6. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 1.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.



F/A-18-WRM-(409-3)01-CATI

Figure 1. Jacket Cut Adjustment

- c. Adjust other blade so blade does not touch cable.
- d. If necessary, repeat steps 6a through 6c until blade cuts through jacket without damaging shield.

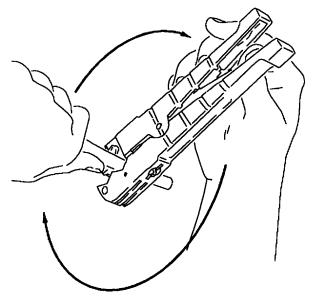
7. USE.

a. Position stripper on cable so that blades face down. See figure 2.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket.



F/A-18-WRM-(409-1)01-SCAN

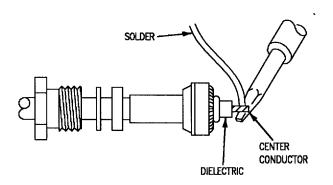
Figure 2. Operation

8. SOLDERING.

9. Soldering provides a mechanical and electrical bond between metallic components. To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

10. TINNING CENTER CONDUCTOR.

- a. Clean and tin soldering iron.
- b. Make sure center conductor wires are twisted together in the same direction as the lay of wire.
- c. Apply heat and solder to center conductor. Remove heat when solder flows into center conductor. Apply only enough solder to join wires together. Individual wires should be coated with solder yet their shape visible. See figure 3.



F/A-18-WRM-(880-1)02-CATI

Figure 3. Tinning Center Conductor

- d. The below conditions are unacceptable: See figure 4.
 - (1) Individual wires not joined to center conductor.
 - (2) Excessive solder.
 - (3) Damaged dielectric.

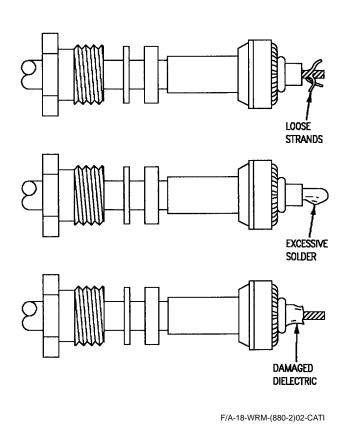
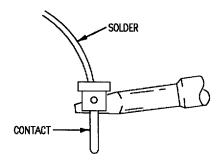


Figure 4. Unacceptable Conditions
After Tinning

11. SOLDERING CONTACT TO CENTER CONDUCTOR

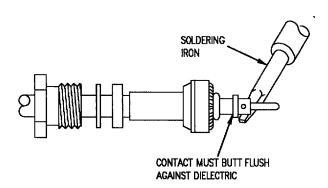
- a. Clean and tin soldering iron.
- b. Apply heat to contact solder cup and fill cup half full with solder. Avoid getting solder on outside of contact. See figure 5.



F/A-18-WRM-(845-1)02-CATI

Figure 5. Filling Solder Cup

c. Position contact on center conductor and apply heat to solder cup. When solder melts, slide contact over center conductor. Remove heat as soon as solder flows between center conductor and contact. Hold cable and contact steady until solder hardens. See figure 6.

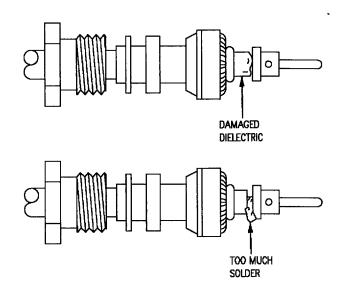


F/A-18-WRM-(845-2)02-CATI

Figure 6. Soldering Contact to Center Conductor

d. Inspect solder joint. Solder should be shiny and flow smoothly from center conductor to contact. The below conditions are unacceptable. See figure 7.

- (1) Damaged dielectric.
- (2) Too much solder.



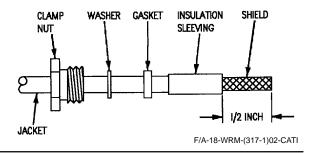
F/A-18-WRM-(845-3)02-CATI

Figure 7. Unacceptable Conditions
After Soldering Contact

CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- 1. Using 45-123 wire cutters, cut end of cable square. Slide hex nut, washer, and gasket over cable. Grooved end of gasket must face end of cable. Using coaxial
- stripper 45-164 adjusted for cable, remove 5/8-inch of jacket. See paragraph 5.

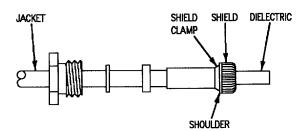


2. Slide shield clamp, with tapered end towards gasket, over shield and against jacket.

NOTE

Shield strands must be smoothly and evenly distributed around face of shield clamp.

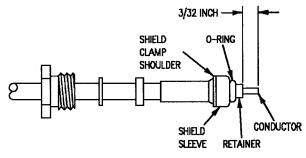
3. Comb and flare out shield. Fold shield over shield clamp and trim even with face of shield clamp.



F/A-18-WRM-(317-2)02-CATI

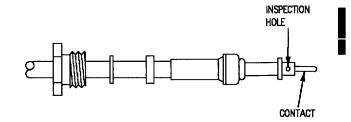
Figure 8. 1211-422 Coax Connector Repair (Sheet 1)

4. Slide shield sleeve over shield and against shoulder of shield clamp. Slide O-ring and retainer over dielectric. Trim dielectric flush with retainer. Cut conductor 3/32-inch beyond retainer.



F/A-18-WRM-(317-3)02-CATI

5. Using W60-3 soldering iron, tin center conductor. See paragraph 10. Using W60-3 soldering iron, solder contact to center conductor. See paragraph 11.



F/A-18-WRM-(319-1)02-CATI

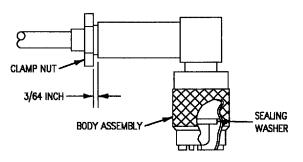
Figure 8. 1211-422 Coax Connector Repair (Sheet 2)

6. Slide body assembly over contact until it stops. Slide gasket, washer, and clamp nut into body assembly. Make sure groove in gasket goes over beveled edge of shield clamp.



Do not allow body assembly to rotate on cable while tightening clamp nut.

- 7. While supporting body assembly, torque clamp nut, using BT-ST-751 torque wrench, to 4 to 6 inchpounds.
 - 8. From front of body assembly slide sealing washer over teflon dielectric until it stops.



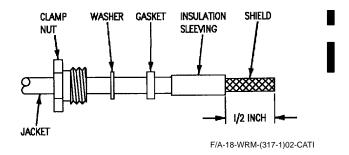
F/A-18-WRM-(849-1)02-CATI

Figure 8. 1211-422 Coax Connector Repair (Sheet 3)

CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

1. Using 45-123 wire cutters, cut end of cable square. Slide hex nut, washer, and gasket over cable. Grooved end of gasket must face end of cable. Using coaxial stripper 45-164 adjusted for cable, remove 5/8-inch of jacket. See paragraph 5.

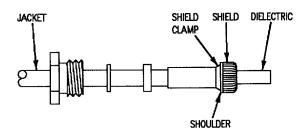


2. Slide shield clamp, with tapered end towards gasket, over shield and against jacket.

NOTE

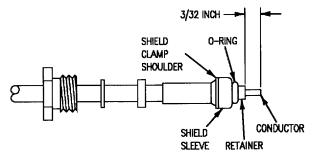
Shield strands must be smoothly and evenly distributed around face of shield clamp.

3. Comb and flare out shield. Fold shield over shield clamp and trim even with face of shield clamp.



F/A-18-WRM-(317-2)02-CATI

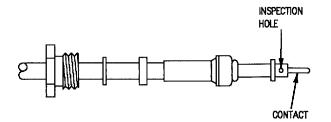
4. Slide shield sleeve over shield and against shoulder of shield clamp. Slide O-ring and retainer over dielectric. Trim dielectric flush with retainer. Cut conductor. 3/32-inch beyond retainer.



F/A-18-WRM-(317-3)02-CATI

Figure 9. 1212-004, 1212-204 and 1212-304 Coax Connector Repair (Sheet 1)

5. Using W60-3 soldering iron, tin center conductor. See paragraph 10. Using W60-3 soldering iron, solder contact to center conductor. See paragraph 11.



F/A-18-WRM-(319-1)02-CATI

6. Slide body assembly over contact until it stops. Slide gasket, washer, and clamp nut into body assembly. Make sure groove in gasket goes over beveled edge of shield clamp.



Do not allow body assembly to rotate on cable while tightening clamp nut.

- 7. While supporting body assembly, torque clamp nut to 4 to 6 inch-pounds.
- 8. From front of body assembly slide sealing washer over teflon dielectric until it stops.

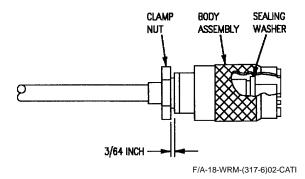


Figure 9. 1212-004, 1212-204 and 1212-304 Coax Connector Repair (Sheet 2)

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS

DATA CABLE ASSEMBLY REPLACEABLE FRONT ENDS

Reference Material

Tactical Electronic Warfare Systems	A1-F18AC-760-300
Weapon Control System	A1-F18AC-740-300

Alphabetical Index

Subject	Page No
Introduction	1
Materials Required	7
Procedure	8
Replaceable Ends, Figure 1	9
Replacement Front Ends Part Numbers, Table 1	2
Support Equipment Required	7

Record of Applicable Technical Directives

None

1. INTRODUCTION.

2. The cable assemblies listed in table 1 are not repairable, however, when a fault is attributed to the cable ends, replacement is possible. This work package is supplemental to those in A1-F18AC-740-300 and

A1-F18AC-760-300 covering cable assemblies. Reference to either A1-F18AC-740-300 or A1-F18AC-760-300 is necessary whenever replacement has been accomplished to check or calibrate critical electrical characteristics. See table 1 for replacement part numbers.

Table 1. Replacement Front Ends Part Numbers

Reference Designation	Cable Part Number	Replacement Front End Part No.	Use On
60J-P007	#1538-8215-21	#1538-5443	F/A-18B
60J-S027	#1538-8215-67	#1538-8963	
60J-T029	#1538-8215-69	#1538-8963	
60P-P008A	#1538-8215-35	#1538-8719	F/A-18A
60P-P008A	#1538-8215-21	#1538-5453	F/A-18B
60P-P008B	#1538-8215-34	#1538-8719	F/A-18A F/A-18B
60P-P008C	#1538-8215-33	#1538-8719	F/A-18A F/A-18B
60P-P008D	#1538-8215-69	#1538-8719	
60P-P008D	#1538-8215-18	#1538-8718	2
60P-P008E	#1538-8215-67	#1538-8719	
60P-P008E	#1538-8215-17	#1538-8719	2
60P-S011	#1538-8215-17	#1538-8718	2
60P-T014	#1538-8215-18	#1538-8719	2
60P-U012	#1538-8215-33	#1538-8513	F/A-18A F/A-18B
60P-V015	#1538-8215-34	#1538-8718	F/A-18A F/A-18B
62J-B037	†AE 9067	†MI-19525	F/A-18A F/A-18B
62J-B038	†AE 9068	†MI-19525	F/A-18A F/A-18B
62J-E021	†AE 8837	†MI-19525	F/A-18A
62J-E022	†AE 8838	†MI-19525	F/A-18A
62J-E023	†AE 8839	†MI-19525	F/A-18A
62J-P021	†AE 8726	†MI-19990	F/A-18B

Table 1. Replacement Front Ends Part Numbers (Continued)

Reference Designation	Cable Part Number	Replacement Front End Part No.	Use On
62J-P023	†AE 8727	†MI-19990	F/A-18B
62P-A013B	†AE 8834	†MI-19515	F/A-18A F/A-18B
62P-A013C	†AE 8843	†MI-19518	F/A-18A F/A-18B
62P-A019A	†AE 8943	†MI-19994	F/A-18A F/A-18B
62P-A019B	†AE 8944	†MI-19994	F/A-18A F/A-18B
62P-A028A	†AE 8833	†MI-19515	F/A-18A F/A-18B
62P-A028B	†AE 8843	†MI-19994	F/A-18A F/A-18B
62P-A028C	†AE 8844	†MI-19994	F/A-18A F/A-18B
62P-A030A	†AE 8943	†MI-19518	F/A-18A F/A-18B
62P-A030C	†AE 8944	†MI-19518	F/A-18A F/A-18B
62P-B010B	†AE 8832	†MI-19518	F/A-18A F/A-18B
62P-B010C	†AE 8844	†MI-19515	F/A-18A F/A-18B
62P-B014B	†AE 9068	†MI-19516	F/A-18A F/A-18B
62P-B014C	†AE 9067	†MI-19516	F/A-18A F/A-18B
62P-B016A	†AE 8943	†MI-19994	F/A-18A F/A-18B
62P-B016B	†AE 8944	†MI-19994	F/A-18A F/A-18B

Table 1. Replacement Front Ends Part Numbers (Continued)

Reference Designation	Cable Part Number	Replacement Front End Part No.	Use On	
62P-B029A	†AE 8943	†MI-19518	F/A-18A F/A-18B	
62P-B029C	†AE 8944	†MI-19518	F/A-18A F/A-18B	
62P-B037	†AE 8836	†MI-19518	F/A-18A F/A-18B	
62P-B038	†AE 8835	†MI-19490	F/A-18A F/A-18B	
62P-E009A	†AE 8832	†MI-19516	F/A-18A F/A-18B	
62P-E009B	†AE 8837	†MI-19516	F/A-18A	
62P-E009B	†AE 8840	†MI-19516	F/A-18B	
62P-E009C	†AE 8839	†MI-19516	F/A-18A	
62P-E009C	†AE 8842	†MI-19516	F/A-18B	
62P-E009D	†AE 8834	†MI-19518	F/A-18A F/A-18B	
62P-E009E	†AE 8835	†MI-19498	F/A-18A F/A-18B	
62P-E009F	†AE 8836	†MI-19515	F/A-18A F/A-18B	
62P-E009G	†AE 8833	†MI-19516	F/A-18A F/A-18B	
62P-E009H	†AE 8838	†MI-19516	F/A-18A	
62P-E009H	†AE 8841	†MI-19516	F/A-18B	
62P-E021	†AE 8840	†MI-19518	F/A-18B	
62P-E021	†AE 9924	†MI-19989	F/A-18A	
62P-E021	†AE 8721	†MI-19989	F/A-18A	
62P-E022	†AE 8841	†MI-19518	F/A-18B	
62P-E022	†AE 8725	†MI-19989	F/A-18A	

Table 1. Replacement Front Ends Part Numbers (Continued)

Reference Designation	Cable Part Number	Replacement Front End Part No.	Use On
62P-E022	†AE 9226	†MI-19989	F/A-18A
62P-E023	†AE 8842	†MI-19518	F/A-18B
62P-E023	†AE 8724	†MI-19989	F/A-18A
62P-E023	†AE 9225	†MI-19989	F/A-18A
62P-P024A	†AE 8725	†MI-19989	F/A-18A
62P-P024A	†AE 9226	†MI-19989	F/A-18A
62P-P024B	†AE 8723	†MI-19989	F/A-18A F/A-18B
62P-P024C	†AE 8722	†MI-19989	F/A-18A
62P-S012B	†AE 9225	†MI-17804	F/A-18A
62P-S012B	†AE 8727	†MI-17801	F/A-18B
62P-S012B	†AE 8724	†MI-17801	F/A-18A
62P-S012C	†AE 8723	†MI-19991	F/A-18A F/A-18B
62P-T011B	†AE 8726	†MI-17801	F/A-18B
62P-T011B	†AE 9224	†MI-17801	F/A-18A
62P-T011B	†AE 8721	†MI-17801	F/A-18A
62P-T011C	†AE 8722	†MI-19991	F/A-18A F/A-18B
64J-P021	#1538-8215-48	#1538-8963	F/A-18A F/A-18B
64J-P021	#1538-8215-71	#1538-8963	F/A-18A F/A-18B
64J-R022	#1538-8215-41	#1538-8907	F/A-18A F/A-18B
64J-R022	#1538-8215-72	#1538-8907	F/A-18A F/A-18B

Table 1. Replacement Front Ends Part Numbers (Continued)

Reference Designation	Cable Part Number	Replacement Front End Part No.	Use On
64P-E001C	#1538-8962	#1538-5833	F/A-18A F/A-18B
64P-E001C	#1538-8445	#1538-5833	F/A-18A F/A-18B
64P-E001L	#1538-8444	#1538-5833	F/A-18A F/A-18B
64P-E001R	#1538-8441	#1538-5989	F/A-18A
64P-E001R	#1538-8510	#1538-5989	F/A-18B
64P-E001S	#1538-8443	#1538-5989	F/A-18A
64P-E001S	#1538-8512	#1538-5989	F/A-18A F/A-18B
64P-E001U	#1538-8446	#1538-5833	F/A-18A F/A-18B
64P-E001V	#1538-8447	#1538-5833	F/A-18A F/A-18B
64P-E002B	†AE 6410	†MI-17042	F/A-18A F/A-18B
64P-E002B	#1538-8215-48	#1538-8908	F/A-18A F/A-18B
64P-E002B	#1538-8215-71	#1538-8908	F/A-18A F/A-18B
64P-E003C	†AE 6411	†MI-19518	F/A-18A F/A-18B
64P-E003C	#1538-8215-51	#1538-5988	F/A-18A F/A-18B
64P-E003C	#1538-8215-72	#1538-5988	F/A-18A F/A-18B
64P-E010A	#1538-8441	#1538-5988	F/A-18A
64P-E010A	#1538-8511	#1538-5989	F/A-18B
64P-E010B	#1538-8442	#1538-5988	F/A-18A

Table 1. Replacement Front Ends Part Numbers (Continued)

Reference Designation	Cable Part Number	Replacement Front End Part No.	Use On
64P-E010B	#1538-8510	#1538-5988	F/A-18B
64P-F004A	#1538-8442	#1538-5989	F/A-18A
64P-F004A	#1538-8511	#1538-5989	F/A-18B
64P-F004B	#1538-8443	#1538-5988	F/A-18A
64P-F004B	#1538-8512	#1538-5989	F/A-18B
64P-S001S	#1538-8512	#1538-5989	F/A-18B
64P-S006	†AE 6410	†MI-19889	F/A-18A F/A-18B
64P-T008	†AE 6411	†MI-19987	F/A-18A F/A-18B
67P-S004	†AE 5719	†1994	F/A-18A F/A-18B
67P-T001B	†AE 5719	†19494	F/A-18A F/A-18B
67P-T001C	†AE 5718	†19494	F/A-18A F/A-18B
67P-T005	†AE 5718	†19494	F/A-18A F/A-18B
† Times Wire Part Numbe # Adams Russel Part Num 1 F/A-18A 161706 A		D UP.	1

2 F/A-18A 161353 THRU 161705, F/A-18B 161354 THRU 161704 AND 161707.

Support Equipment Required

Materials Required

Part Number or Type Designation	Nomenclature	Specification or Part Number	Nomenclature
3308AS100	Repair Set - Wire and Connector	MS122	Lubricant, Fluorocarbon

3. PROCEDURE.

NOTE

The 9/16 or 3/4-inch wrench used for this step must be thinner than 1/8-inch.

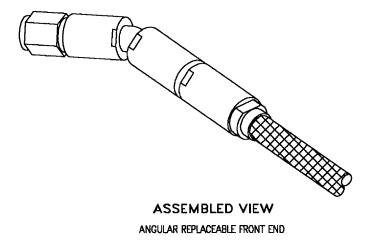
- a. Hold the intermediate body of the connector assembly using a 9/16-inch open end wrench for the 1538-5988 and 1538-5989 replaceable ends and their intermediate bodies. Use 3/4-inch open end wrench for the 1538-5833 replaceable ends.
- b. Install a torque wrench to the front wrench flats.
- c. Apply a counterclockwise force with the torque wrench to break loose the front end.

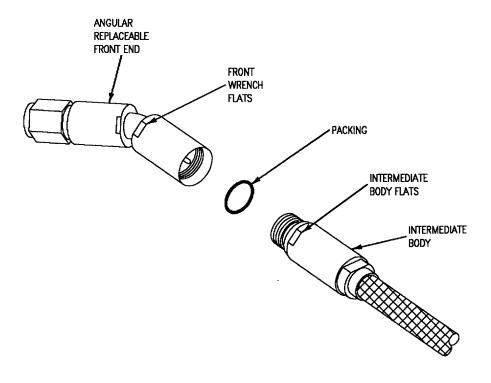
NOTE

When replacing the head of 90° connector, the head portion of the connector should never be rotated during installation or removal. Instead, only the clamping nut should be rotated while the connector head is held stationary. This precaution will prevent damage to the internal bullet during installation. When replacing the head it should be clocked (oriented) to the correct position prior to Step 3g.

d. Remove the packing on the intermediate body and replace it with the correct packing. Lubricate the packing with a small amount of fluorocarbon lubricant.

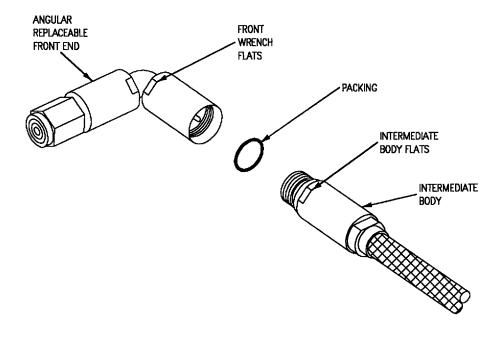
- e. Install a replacement front end by hand, threading in a clockwise direction.
 - f. Hold the intermediate body with a wrench.
- g. Install a torque wrench to the front wrench flats.
- h. Using BT-ST-751 torque wrench, torque to 100 to 110 inch-pounds.

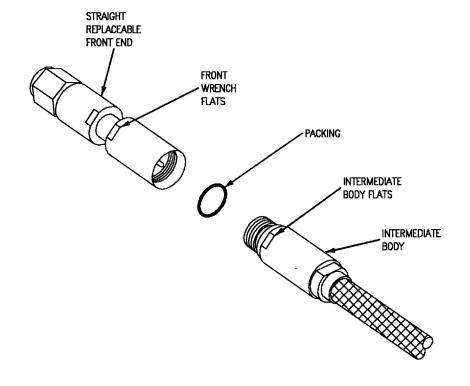




F/A-18-WRM-(842-1)02-CATI

Figure 1. Replaceable Ends (Sheet 1)





F/A-18-WRM-(842-2)02-CATI

Figure 1. Replaceable Ends (Sheet 2)

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

31-33449-XX, 31-34179 XX, 5801-XXXX, 5811-XXXX and 5813-XXXX

(MIL-C-39012) TWINAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No
Coaxial Cable Strippers 45-163 Adjustment and Use	3
Depth of Cut Adjustment	4
Distance Adjustment	3
Use	5
Crimping Operation, Figure 6	6
Crimp Tool M22520/5-01 Assembly and Use	5
Crimp Procedure	6
Die Installation	5
Die Removal	6
Description	3
Die Installation, Figure 5	5
Distance Adjustment, Figure 1	3
Filling Solder Cup, Figure 11	8
Jacket Cut Adjustment, Figure 2	4
Lower Die Removal, Figure 8	7
Materials Required	3
Operation, Figure 4	5
Procedure	3
Reference Designation to Figure Number Index	2
Shield Cut Adjustment, Figure 3	4
Soldering	7
Soldering Contact to Conductor	8
Tinning Conductors	7
Soldering Contact to Conductor, Figure 12	8
Support Equipment Required	3

Alphabetical Index (Continued)

Subject	Page No
Tinning Center Conductor, Figure 9	7
Unacceptable Conditions After Soldering Contact, Figure 13	9
Unacceptable Conditions After Tinning, Figure 10	8
Upper Die Removal, Figure 7	6
31-33449-XX and 5801-XXXX Twinax Connector Repair, Figure 14	10
31-34179-1 Twinax Connector Repair, Figure 16	16
31-34179-2 Twinax Connector Repair, Figure 17	
5811-XXXX and 5813-XXXX Twinax Connector Repair, Figure 15	

Record of Applicable Technical Directives

None

Reference Designati Number Ind	_	Reference Designation Number Index (C	
		Reference Designation	Figure No.
Reference Designation	Figure No.	76P-F001E 76P-F001G	16 16
61P-E018	14	76P-F002E	16
61P-E166	14	76P-F002G	16
61P-F001D	15	77P-K001E	16
61P-F001E	15	77P-K001G	16
61P-F001F	15	77P-L001E	16
61P-F001H	15	77P-L001G	16
61P-F001J	15	3 80P-J020	17
61P-F001K	15	4 80P-J020	16
61P-F036	14	1 80P-L021	17
61P-F037	14	2 80P-L021	16
61P-F038	14	1 80P-L022	17
61P-F039	14	2 80P-L022	16
61P-R168	15		
61P-U027	14	<u>LEGEND</u>	
61P-U041	14		
61P-V026	14	1 161353 THRU 161924.	
61P-V042	14	2 161925 AND UP.	
61P-W096	14	3 F/A-18B 161354 THRU 161	924
61P-Y096	14	4 F/A-18B 161932 AND UP	

1. DESCRIPTION.

Part Number or

2. These connectors are twin conductor, crimp and solder type twinax plugs. There are two types of connectors, straight and right angle. These connectors have a temperature range of -85° to +392°F. They are not repairable.

Support Equipment Required

Type Designation	Nomenclature
HT-900	Heat Tool
3308AS100	Repair Set - Wire and Connector
1317S100-1	Nitrogen Servicing Unit - NAN-3
-	Torque Wrench, 0 to 25 Inch-Pounds

Materials Required

Specification or Part Number	Nomenclature
MS23053/5-XXX-0	Shrink Sleeve
SN60WRMAP2-0-040	Solder

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table within this WP for correct figure.

5. COAXIAL CABLE STRIPPERS 45-163 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting two spare blades will change distance between blades 3/64-inch.

- c. Install screws and tighten finger tight.
- d. Adjust depth of cut.

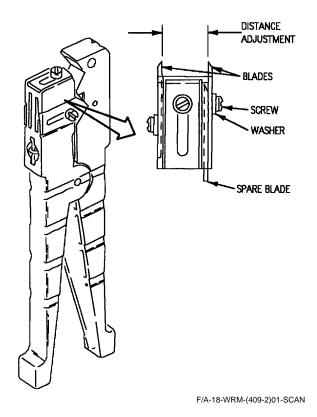


Figure 1. Distance Adjustment

7. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.

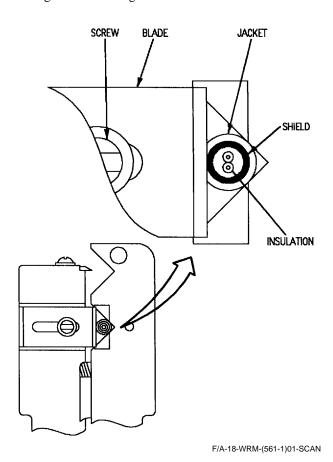


Figure 2. Jacket Cut Adjustment

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

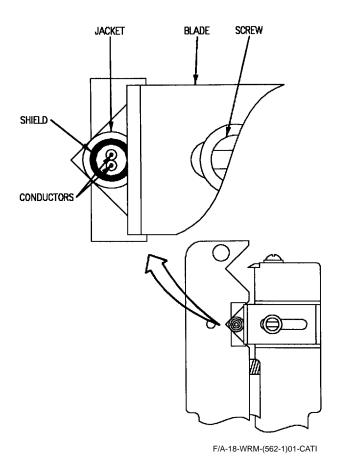


Figure 3. Shield Cut Adjustment

8. USE.

a. Position stripper on cable so that blades face down. See figure 4.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.

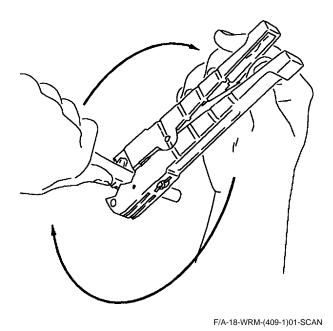
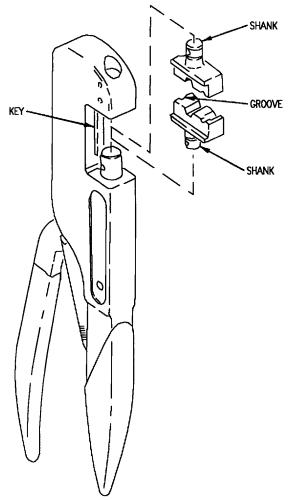


Figure 4. Operation

9. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

10. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 5.
- b. Close handle to make sure dies are seated and locked in place.

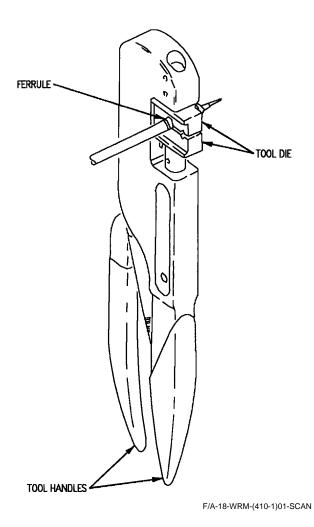


F/A-18-WRM-(410-2)01-SCAN

Figure 5. Die Installation

11. CRIMP PROCEDURE.

- a. Position crimping material in correct cavity of dies. See figure 6.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

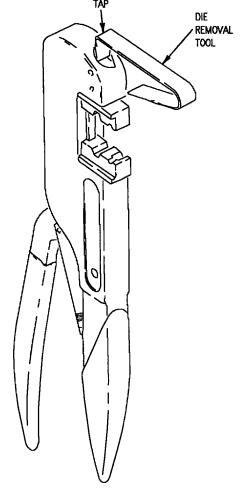


12. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 7.



F/A-18-WRM-(410-3)01-SCAN

Figure 6. Crimping Operation

Figure 7. Upper Die Removal

- b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.
- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 8.

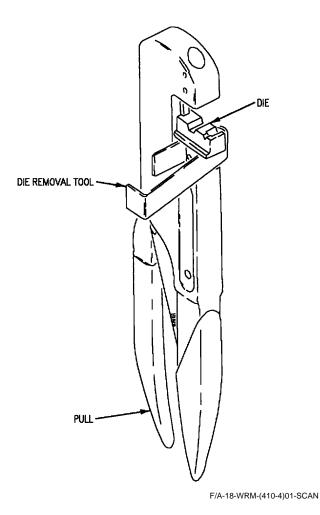


Figure 8. Lower Die Removal

d. Pull handle open with a snap action. The die will be released from the lock spring and can then be removed by hand.

13. **SOLDERING.**

14. Soldering provides a mechanical and electrical bond between metallic components. To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

15. TINNING CONDUCTORS.

- a. Clean and tin soldering iron.
- b. Make sure conductor wires are twisted together in the same direction as the lay of wire.
- c. Apply heat and solder to conductor. Remove heat when solder flows into conductor. Apply only enough solder to join wires together. Individual wires should be coated with solder yet their shape visible. See figure 9.

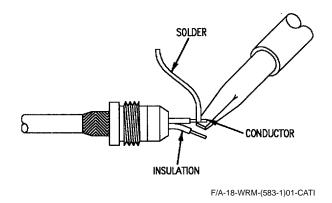


Figure 9. Tinning Center Conductor

- d. The below conditions are unacceptable: See figure 10.
 - (1) Individual wires not joined to center conductor.
 - (2) Excessive solder.
 - (3) Damaged insulation.

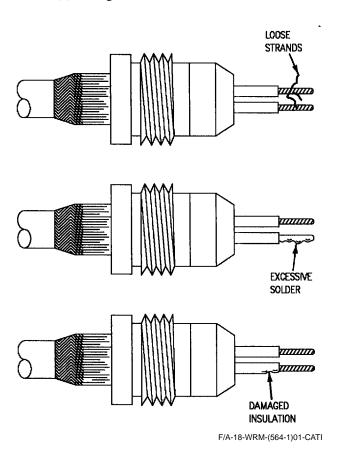


Figure 10. Unacceptable Conditions After Tinning

16. SOLDERING CONTACT TO CONDUCTOR.

a. Clean and tin soldering iron.

b. Apply heat to contact solder cup and fill cup with solder. Avoid getting solder on outside of See figure 11.

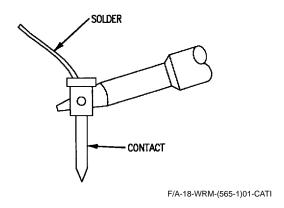


Figure 11. Filling Solder Cup

c. Position contact on conductor and apply heat to solder cup. When solder melts, slide contact over conductor. Remove heat as soon as solder flows between conductor and contact. Hold cable and contact steady until solder hardens. See figure 12.

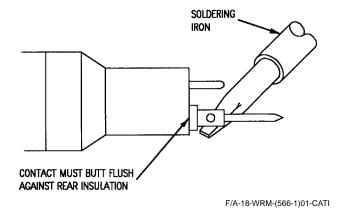
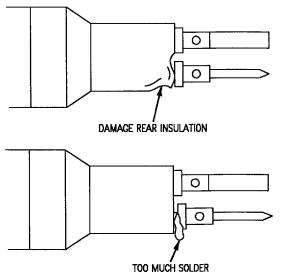


Figure 12. Soldering Contact to Center Conductor

- d. Inspect solder joint. Solder should be shiny and flow smoothly from conductor to contact. The below conditions are unacceptable. See figure 13.
 - (1) Too much solder.
 - (2) Damaged insulator.



F/A-18-WRM-(567-1)01-CATI

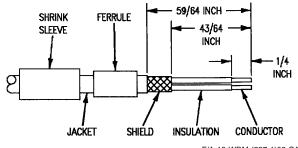
Figure 13. Unacceptable Conditions After Soldering Contact

CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

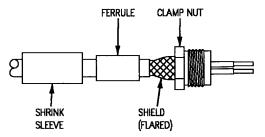
To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

- 1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust
- cable stripper 45-163 for cable with 1/4-inch between blades (see paragraph 10). Strip cable jacket 59/64 inch and shield 43/64-inch. Using sharp knife, remove 1/4-inch of insulation from each conductor.



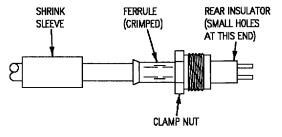
F/A-18-WRM-(237-1)02-CATI

2. Slide clamp nut over support, then slide support over conductors and under shield.



F/A-18-WRM-(237-2)02-CATI

3. Slide ferrule over shield until it butts against clamp nut. Using M22520/5-19 die set and M22520/5-01 crimping tool frame, crimp ferrule in A cavity of die set (see paragraph 9). Using W60-3 soldering iron, tin center conductors (see paragraph 15). Slide rear insulator over conductors.



F/A-18-WRM-(237-3)02-CATI

Figure 14. 31-33449-XX and 5801-XXXX Twinax Connector Repair (Sheet 1)

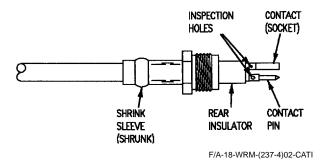
4. Slide shrink sleeve over ferrule until it butts against clamp nut.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

5. Shrink sleeve using heat tool and nitrogen servicing unit. Using W60-3 soldering iron, solder contact to applicable wire (see paragraph 16).



6. Slide front insulator on contact so that the pin contact is exposed.

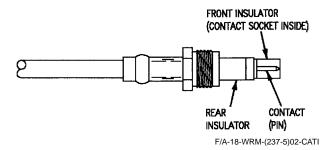


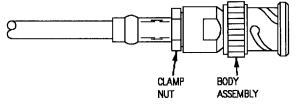
Figure 14. 31-33449-XX and 5801-XXXX Twinax Connector Repair (Sheet 2)

7. Engage front insulator with insulator in body assembly and insert cable into body assembly.



To prevent damage to connector, do not allow body assembly or cable to rotate while tightening clamp nut.

8. While supporting body assembly, torque clamp nut 15 inch-pounds.



F/A-18-WRM-(237-6)02-CATI

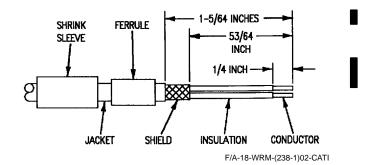
Figure 14. 31-33449-XX and 5801-XXXX Twinax Connector Repair (Sheet 3)

CAUTION

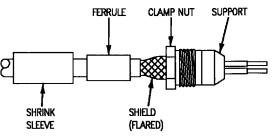
To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-163 for cable with 1/4-inch between blades (see paragraph 5). Strip cable jacket 1-5/64-inch and shield 53/64-inch. Using sharp knife, remove 1/4-inch of insulation from each conductor.

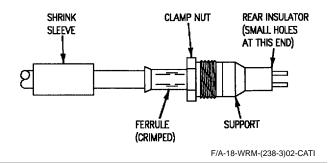


2. Slide clamp nut over support, then slide support over conductors and under shield.



F/A-18-WRM-(238-2)02-CATI

3. Slide ferrule over shield until it butts against support. Using M22520/5-19 die set and M22520/5-01 crimping tool frame, crimp ferrule in A cavity of die set (see paragraph 9). Using W60-3 soldering iron, tin center conductors (see paragraph 15).



4. Slide shrink sleeve over ferrule until it butts against support.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

5. Shrink sleeve using heat tool and nitrogen servicing unit. Using W60-3 soldering iron, solder contacts to applicable wires (see paragraph 16).

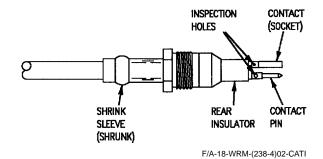
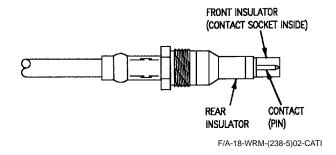


Figure 15. 5811-XXXX and 5813-XXXX Twinax Connector Repair (Sheet 2)

6. Slide front insulator on contacts so that the pin contact is exposed.



7. Engage front insulator with insulator in body assembly and insert cable into body assembly.



To prevent damage to connector, do not allow body assembly or cable to rotate while tightening clamp nut.

8. While holding body assembly, screw clamp nut into body assembly. Using torque wrench torque clamp nut 15 inch-pounds.

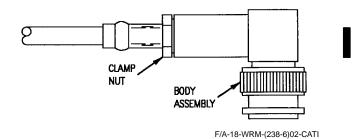


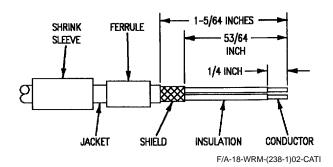
Figure 15. 5811-XXXX and 5813-XXXX Twinax Connector Repair (Sheet 3)

CAUTION

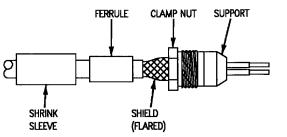
To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-163 for cable with 1/4-inch between blades (see paragraph 5). Strip cable jacket 1-5/64-inch and shield 53/64-inch. Using sharp knife, remove 1/4-inch of insulation from each conductor.

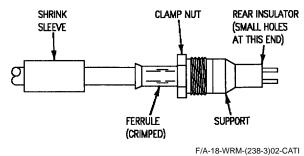


2. Slide clamp nut over support, then slide support over conductors and under shield.



F/A-18-WRM-(238-2)02-CATI

3. Slide ferrule over shield until it butts against support. Using M22520/5-35 die set B cavity and M22520/5-01 crimping tool frame, crimp ferrule in A cavity of die set (see paragraph 9). Using W60-3 soldering iron, tin center conductors (see paragraph 15). Slide rear insulator over conductors.



17A-10-WINW-(250-5)02-OAT

Figure 16. 31-34179-1 Twinax Connector Repair (Sheet 1)

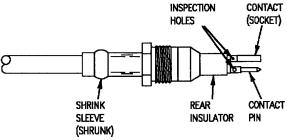
4. Slide shrink sleeve over ferrule until it butts against support.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

5. Shrink sleeve using heat tool and nitrogen servicing unit. Using W60-3 soldering iron, solder contacts to applicable wires (see paragraph 16).



F/A-18-WRM-(238-4)02-CATI

6. Slide front insulator on contact so that the pin contact is exposed.

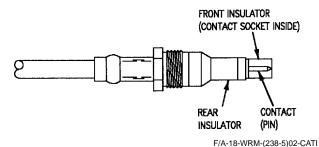


Figure 16. 31-34179-1 Twinax Connector Repair (Sheet 2)

7. Engage front insulator with insulator in body assembly and insert cable into body assembly.



To prevent damage to connector, do not allow assembly or cable to rotate while tightening clamp nut.

8. While holding body assembly, screw clamp nut into body assembly. Using torque wrench torque clamp nut 15 inch-pounds.

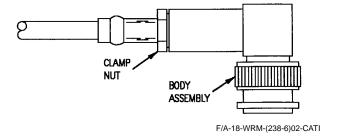


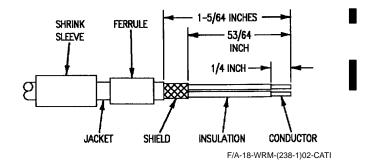
Figure 16. 31-34179-1 Twinax Connector Repair (Sheet 3)

CAUTION

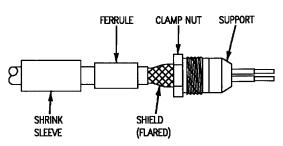
To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-163 for cable with 1/4-inch between blades (see paragraph 5). Strip cable jacket 1-5/64-inch and shield 53/64-inch. Using sharp knife, remove 1/4-inch of insulation from each conductor.

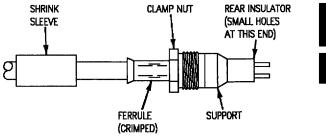


2. Slide clamp nut over support, then slide support over conductors and under shield.



F/A-18-WRM-(238-2)02-CATI

3. Slide ferrule over shield until it butts against support. Using M22520/5-35 die set and M22520/5-01 crimping tool frame, crimp ferrule in B cavity of die set (see paragraph 9). Using W60-3 soldering iron, tin center conductors (see paragraph 15). Slide rear insulator over conductors.



F/A-18-WRM-(238-3)02-CATI

Figure 17. 31-34179-2 Twinax Connector Repair (Sheet 1)

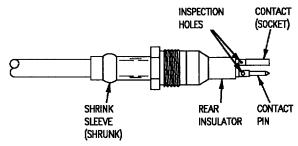
4. Slide shrink sleeve over ferrule until it butts against support.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

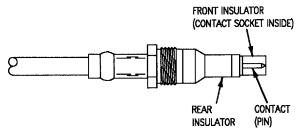
Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

5. Shrink sleeve using heat tool and nitrogen servicing unit. Using W60-3 soldering iron, solder contacts to applicable wires (see paragraph 16).



F/A-18-WRM-(238-4)02-CATI

6. Slide front insulator on contacts so that the pin contact is exposed.



F/A-18-WRM-(238-5)02-CATI

7. Engage front insulator with insulator in body assembly and insert cable into body assembly.



To prevent damage to connector, do not allow body assembly or cable to rotate while tightening clamp nut.

8. While holding body assembly, torque clamp nut 15-inch-pounds.

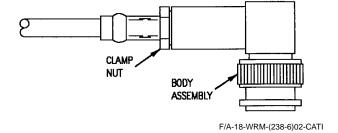


Figure 17. 31-34179-2 Twinax Connector Repair (Sheet 3)

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

31-33819-13 and 5841-XXXX (MIL-C-39012) TWINAX CONNECTOR REPAIR

Reference Material

Electrical System	I-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	718AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Subject	Page No.
Coaxial Cable Strippers 45-163 Adjustment and Use	3
Depth of Cut Adjustment	4
Distance Adjustment	3
Use	5
Crimping Operation, Figure 6	6
Crimp Tool M22520/5-01 Assembly and Use	5
Crimp Procedure	6
Die Installation	5
Die Removal	6
Description	2
Die Installation, Figure 5	5
Distance Adjustment, Figure 1	3
Filling Solder Cup, Figure 11	8
Jacket Cut Adjustment, Figure 2	4
Lower Die Removal, Figure 8	7
Materials Required	2
Operation, Figure 4	5
Procedure	3
Reference Designation to Figure Number Index	2
Shield Cut Adjustment, Figure 3	4
Soldering	7
Soldering Contact to Conductor	8
Tinning Conductors	7
Soldering Contact to Center Conductor, Figure 12	8
Support Equipment Required	2
Tinning Center Conductor, Figure 9	7
Unacceptable Conditions After Soldering Contact, Figure 13	9

Alphabetical Index (Continued)

Subject	Page No
Unacceptable Conditions After Tinning, Figure 10	8
Upper Die Removal, Figure 7	6
31-33819-13, 5841-0904 and 5841-0905 Twinax Connector Repair, Figure 14	10

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index		Support Equipment Required		
Reference Designation	Figure No.	Part Number or Type Designation	Nomenclature	
61J-E018 61J-E166 61J-F036 61J-F037 61J-F038 61J-F110C 61J-R036	14 14 14 14 14 14 14	HT-900 3308AS100 1317AS100-1 BT-ST-751-E	Heat Tool Repair Set - Wire and Connector Nitrogen Servicing Unit - NAN-3 Torque Wrench, 0 to 25 Inch-Pounds	
61J-R037 61J-R038	14 14	Materia	als Required	
61J-R039 61J-U027 61J-U041	14 14 14	Specification or Part Number	Nomenclature	
61J-V026 61J-V042 61J-W096	14 14 14	MS23053/5-XXX-0 SN60WRMAP-2-040	Shrink Sleeve Solder	

1. **DESCRIPTION.**

2. These connectors are straight twin conductor, crimp and solder type twines plugs. These connectors have a temperature range of -85 $^{\circ}$ to +392 $^{\circ}$ F. They are not repairable.

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table within this WP for correct figure.

5. COAXIAL CABLE STRIPPERS 45-163 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

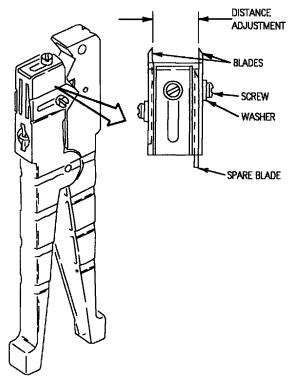
6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting two spare blades will change distance between blades 3/64-inch.

- c. Install screws and tighten finger tight.
- d. Adjust depth of cut.



F/A-18-WRM-(409-2)01-SCAN

Figure 1. Distance Adjustment

7. DEPTH OF CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through jacket without nicking shield and tighten screw.

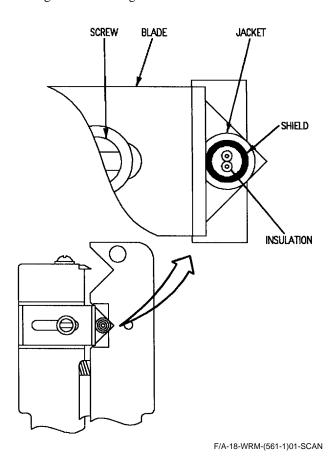


Figure 2. Jacket Cut Adjustment

- c. Remove coaxial and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

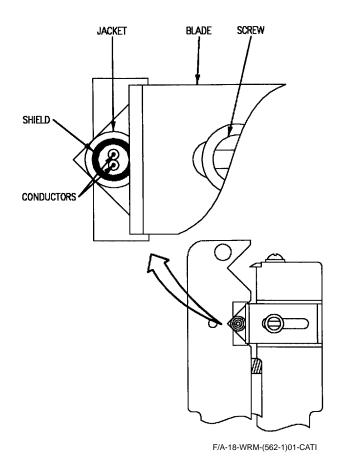


Figure 3. Shield Cut Adjustment

8. USE.

a. Position stripper on cable so that blades face down. See figure 4.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.

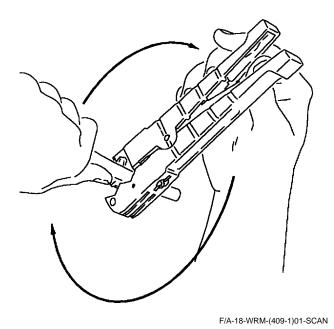
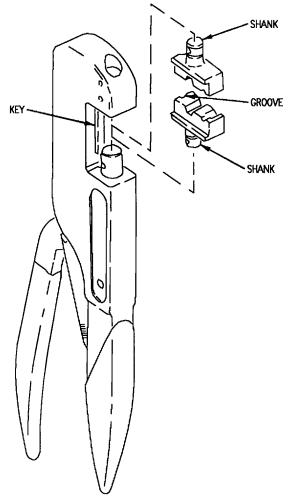


Figure 4. Operation

9. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

10. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 5.
- b. Close handle to make sure dies are seated and locked in place.



F/A-18-WRM-(410-2)01-SCAN

Figure 5. Die Installation

11. CRIMP PROCEDURE.

- a. Position crimping material in correct cavity of dies. See figure 6.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

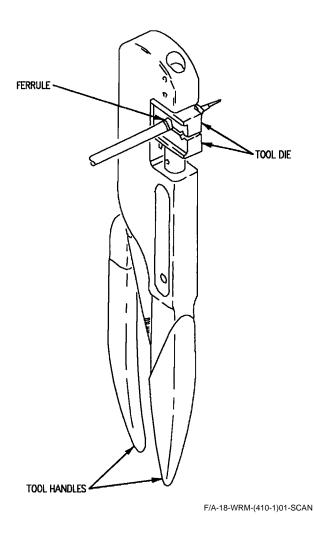


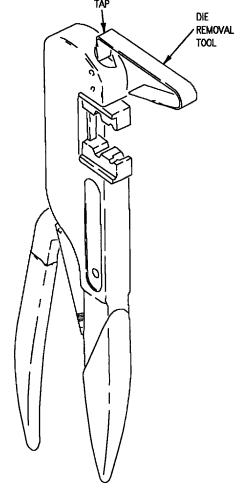
Figure 6. Crimping Operation

12. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 7.



F/A-18-WRM-(410-3)01-SCAN

Figure 7. Upper Die Removal

- b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.
- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 8.

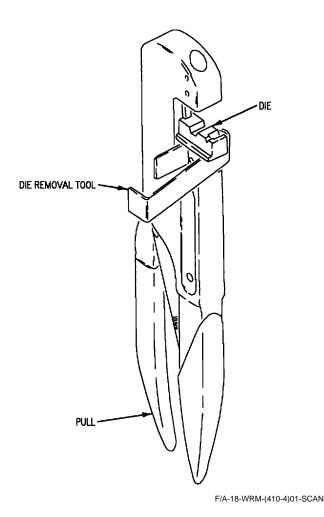


Figure 8. Lower Die Removal

d. Pull handle open with a snap action. The die will be released from the lock spring and can then be removed by hand.

13. **SOLDERING.**

14. Soldering provides a mechanical and electrical bond between metallic components. To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

15. TINNING CONDUCTORS.

- a. Clean and tin soldering iron.
- b. Make sure conductor wires are twisted together in the same direction as the lay of wire.
- c. Apply heat and solder to conductor. Remove heat when solder flows into conductor. Apply only enough solder to join wires together. Individual wires should be coated with solder yet their shape visible. See figure 9.

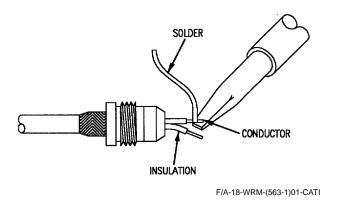


Figure 9. Tinning Center Conductor

- d. The below conditions are unacceptable: See figure 10.
 - (1) Individual wires not joined to center conductor.
 - (2) Excessive solder.
 - (3) Damaged insulation.

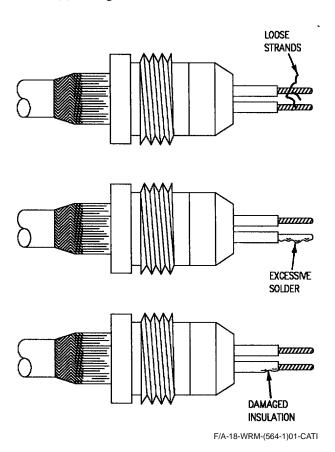


Figure 10. Unacceptable Conditions After Tinning

16. SOLDERING CONTACT TO CONDUCTOR.

a. Clean and tin soldering iron.

b. Apply heat to contact solder cup and fill cup with solder. Avoid getting solder on outside of contact. See figure 11.

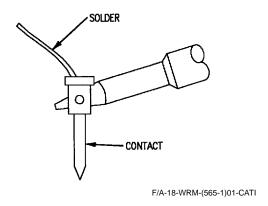


Figure 11. Filling Solder Cup

c. Position contact on conductor and apply heat to solder cup. When solder melts, slide contact over conductor. Remove heat as soon as solder flows between conductor and contact. Hold cable and contact steady until solder hardens. See figure 12.

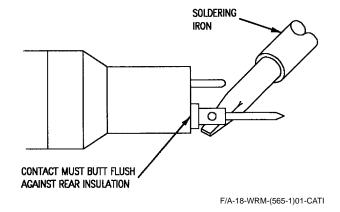
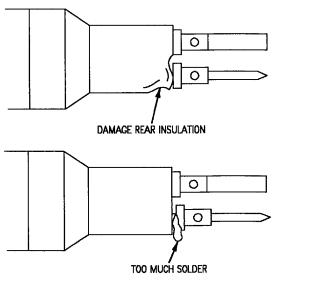


Figure 12. Soldering Contact to Center Conductor

- d. Inspect solder joint. Solder should be shiny and flow smoothly from conductor to contact. The below conditions are unacceptable. See figure 13.
 - (1) Damaged insulator.
 - (2) Too much solder.



F/A-18-WRM-(567-1)01-CATI

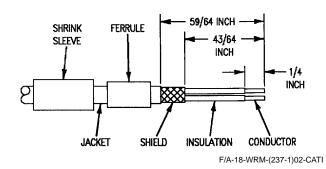
Figure 13. Unacceptable Conditions After Soldering Contact

CAUTION

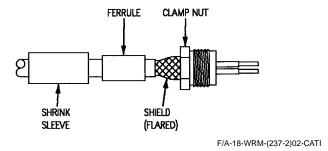
To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

1. Using 45-123 wire cutters, cut end of cable square. Cut a length of shrink sleeve 3/8-inch longer than ferrule. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-163 for cable with 1/4-inch between blades (see paragraph 5). Strip cable jacket 59/64-inch and shield 43/64-inch. Using sharp knife, remove 1/4-inch of insulation from each conductor.



2. Slide clamp nut over conductors and under shield. Using W60-3 soldering iron, tin center conductors (see paragraph 15).



3. Install rear insulator over dielectric and against clamp nut.

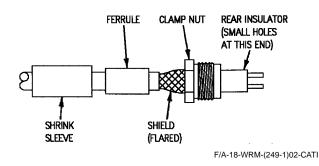
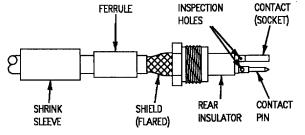


Figure 14. 31-33819-13, 5841-0904 and 5841-0905 Twinax Connector Repair (Sheet 1)



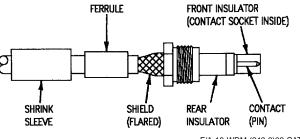
Make sure center conductor is visible in solder hole.

4. Install the contacts into rear insulator, butting contact shoulders against rear insulator. Using W60-3 soldering iron, solder contacts to applicable wire (see paragraph 16).



F/A-18-WRM-(249-2)02-CATI

5. Slide front insulator on contacts so that the pin contact is exposed.



F/A-18-WRM-(249-3)02-CATI

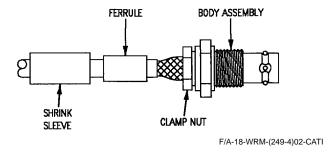
Figure 14. 31-33819-13, 5841-0904 and 5841-0905 Twinax Connector Repair (Sheet 2)

6. Engage front insulator with insulator in body assembly and insert cable into body assembly.

CAUTION

To prevent damage to connector, do not allow clamp nut or cable to rotate while tightening body assembly.

7. While holding clamp nut, screw body assembly on clamp nut. Using torque wrench torque body assembly 15 inch-pounds.



8. Slide ferrule over shield until it butts against clamp nut. Using M22520/5-19 die set and M22520/5-01 crimping tool frame, crimp ferrule in B cavity of die set (see paragraph 9).

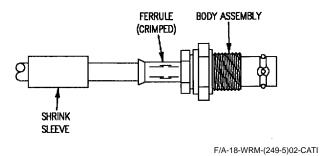


Figure 14. 31-33819-13, 5841-0904 and 5841-0905 Twinax Connector Repair (Sheet 3)

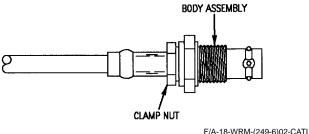
9. Slide shrink sleeve over ferrule until it butts against clamp nut.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

10. Shrink sleeve using heat tool and nitrogen servicing unit.



F/A-18-WRM-(249-6)02-CATI

Figure 14. 31-33819-13, 5841-0904 and 5841-0905 Twinax Connector Repair (Sheet 4)

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

4806-XXXX, 4811-XXXX, 4816-XXXX, 4841-XXXX and 4846-XXXX (MIL-C-39012) BNC TYPE TRIAX CONNECTOR REPAIR

Reference Material

Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00

Alphabetical Index

Coaxial Cable Strippers 45-163 Adjustment and Use Distance Adjustment Inner Shield Cut Adjustment Outer Jacket and Shield Cut Adjustment Use Crimping Operation, Figure 12 Crimp Tool M22520/5-01 Assembly and Use Crimp Procedure Die Installation Die Removal Description Die Installation, Figure 11 Distance Adjustment, Figure 1 Filling Solder Cup, Figure 8 Inner Jacket Cut Adjustment, Figure 4 Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor Soldering Contact to Center Conductor, Figure 9	Subject	Page No.
Inner Shield Cut Adjustment Outer Jacket and Shield Cut Adjustment Use Crimping Operation, Figure 12 Crimp Tool M22520/5-01 Assembly and Use Crimp Procedure Die Installation Die Removal Description Die Installation, Figure 11 Distance Adjustment, Figure 1 Filling Solder Cup, Figure 8 Inner Jacket Cut Adjustment, Figure 4 Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Coaxial Cable Strippers 45-163 Adjustment and Use	3
Outer Jacket and Shield Cut Adjustment Use Crimping Operation, Figure 12 Crimp Tool M22520/5-01 Assembly and Use Crimp Procedure Die Installation Die Removal Description Die Installation, Figure 11 Distance Adjustment, Figure 1 Filling Solder Cup, Figure 8 Inner Jacket Cut Adjustment, Figure 4 Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Distance Adjustment	3
Use Crimping Operation, Figure 12 Crimp Tool M22520/5-01 Assembly and Use Crimp Procedure Die Installation Die Removal Description Die Installation, Figure 11 Distance Adjustment, Figure 1 Filling Solder Cup, Figure 8 Inner Jacket Cut Adjustment, Figure 4 Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Inner Shield Cut Adjustment	5
Crimping Operation, Figure 12 Crimp Tool M22520/5-01 Assembly and Use Crimp Procedure Die Installation Die Removal Description Die Installation, Figure 11 Distance Adjustment, Figure 1 Filling Solder Cup, Figure 8 Inner Jacket Cut Adjustment, Figure 4 Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Outer Jacket and Shield Cut Adjustment	4
Crimp Tool M22520/5-01 Assembly and Use Crimp Procedure Die Installation Die Removal Description Die Installation, Figure 1 Distance Adjustment, Figure 1 Filling Solder Cup, Figure 8 Inner Jacket Cut Adjustment, Figure 4 Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Use	5
Crimp Tool M22520/5-01 Assembly and Use Crimp Procedure Die Installation Die Removal Description Die Installation, Figure 1 Distance Adjustment, Figure 1 Filling Solder Cup, Figure 8 Inner Jacket Cut Adjustment, Figure 4 Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Crimping Operation, Figure 12	8
Crimp Procedure Die Installation Die Removal Description Die Installation, Figure 11 Distance Adjustment, Figure 1 Filling Solder Cup, Figure 8 Inner Jacket Cut Adjustment, Figure 4 Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor		8
Die Removal Description Die Installation, Figure 11 Distance Adjustment, Figure 1 Filling Solder Cup, Figure 8 Inner Jacket Cut Adjustment, Figure 4 Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor		8
Description Die Installation, Figure 11 Distance Adjustment, Figure 1 Filling Solder Cup, Figure 8 Inner Jacket Cut Adjustment, Figure 4 Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Die Installation	8
Die Installation, Figure 11 Distance Adjustment, Figure 1 Filling Solder Cup, Figure 8 Inner Jacket Cut Adjustment, Figure 4 Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Die Removal	9
Distance Adjustment, Figure 1 Filling Solder Cup, Figure 8 Inner Jacket Cut Adjustment, Figure 4 Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Description	2
Filling Solder Cup, Figure 8 Inner Jacket Cut Adjustment, Figure 4 Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Die Installation, Figure 11	8
Inner Jacket Cut Adjustment, Figure 4 Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Distance Adjustment, Figure 1	3
Lower Die Removal, Figure 14 Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Filling Solder Cup, Figure 8	7
Materials Required Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Inner Jacket Cut Adjustment, Figure 4	5
Operation, Figure 5 Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Lower Die Removal, Figure 14	9
Outer Jacket Cut Adjustment, Figure 2 Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Materials Required	2
Outer Shield Cut Adjustment, Figure 3 Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Operation, Figure 5	5
Procedure Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Outer Jacket Cut Adjustment, Figure 2	4
Reference Designation to Figure Number Index Soldering Soldering Contact to Center Conductor Tinning Center Conductor	Outer Shield Cut Adjustment, Figure 3	4
Soldering	Procedure	3
Soldering Contact to Center Conductor		2
Tinning Center Conductor	Soldering	6
	Soldering Contact to Center Conductor	7
Soldering Contact to Center Conductor, Figure 9	Tinning Center Conductor	6
	Soldering Contact to Center Conductor, Figure 9	7

Alphabetical Index (Continued)

Subject	Page No
Support Equipment Required	2
Tinning Center Conductor, Figure 6	6
Unacceptable Conditions After Soldering Contact, Figure 10	7
Unacceptable Conditions After Tinning, Figure 7	6
Upper Die Removal, Figure 13	9
4806-0903 and 4806-0905 Triaxial Connector Repair, Figure 18	19
4811-0903, 4811-0905, 4816-0903 and 4816-09905 Triaxial Connector Repair, Figure 16	13
4841-0903 and 4841-0905 Triaxial Connector Repair, Figure 15	10
4846-0903 and 4846-0905 Triaxial Connector Repair, Figure 17	16

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

Reference Designation Figure No. 60J-A001C 17 17 60J-A001D 60J-H017 15 60J-H018 15 60P-A017 18 18 60P-A018 61J-J035 15 61J-J040 15 61P-D035 16 61P-D040 16 61P-F001C 16 61P-F001G 16

1. **DESCRIPTION.**

2. The BNC-type coaxial connector is a general purpose, threaded coupling connector used with coaxial cable. These connectors meet the requirements of MIL-C-39012.

Support Equipment Required

	14.16.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
Part Number or Type Designation	Nomenclature
HT-900	Heat Tool
3308AS100	Repair Set - Wire and
	Connector
1317AS100-1	Nitrogen Servicing
	Unit - NAN-3
Materi	als Required
Specification	

Specification or Part Number Nomenclature

MS23053/5-XXX-0 Shrink Sleeve

3. PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

4. Refer to Reference Designation to Figure Number Index table within this work package for correct figure.

5. COAXIAL CABLE STRIPPERS 45-163 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

6. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 1.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting one spare blade will change distance between blade 3/64-inch.

- c. Install screws and tighten finger tight.
- d. Adjust depth of cut.

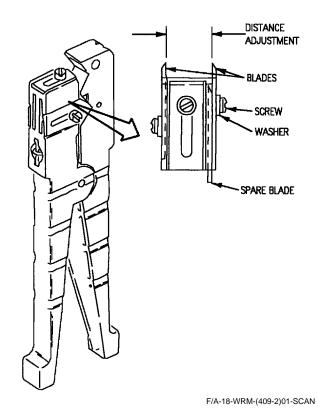


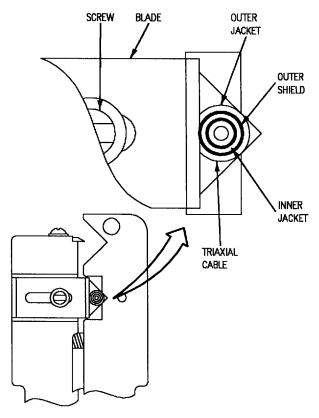
Figure 1. Distance Adjustment

7. OUTER JACKET AND SHIELD CUT ADJUSTMENT.

NOTE

A test strip should be done on spare triax before stripping triax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 2.
- b. Adjust blade so it cuts through outer jacket without nicking outer shield and tighten screw.



F/A-18-WRM-(568-1)01-CATI

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 3.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If necessary, repeat steps 7a through 7d until blades cut through jacket and shield without damaging shield and dielectric.

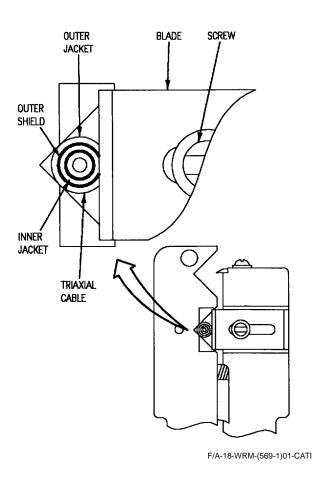


Figure 2. Outer Jacket Cut Adjustment

Figure 3. Outer Shield Cut Adjustment

8. INNER SHIELD CUT ADJUSTMENT.

- a. Position cable in stripper until the end butts against the blade. See figure 4.
- b. Adjust blade so it cuts through inner jacket without nicking conductor and tighten screw.
 - c. Adjust other blade so it does not touch cable.

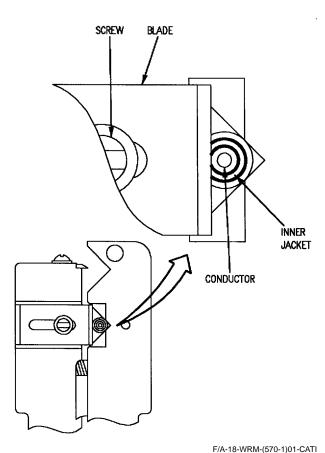


Figure 4. Inner Jacket Cut Adjustment

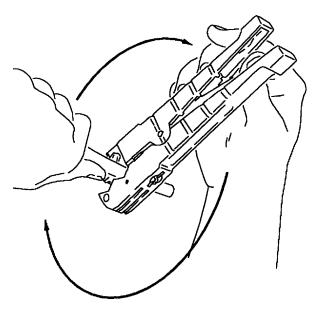
9. **USE.**

a. Position stripper on cable so that blades face down. See figure 5.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be necessary to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.



F/A-18-WRM-(409-1)01-SCAN

Figure 5. Operation

10. SOLDERING.

11. Soldering provides a mechanical and electrical bond between metallic components. To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

12. TINNING CENTER CONDUCTOR.

- a. Clean and tin soldering iron.
- b. Make sure center conductor wires are twisted together in the same direction as the lay of wire.
- c. Apply heat and solder flows into conductor. Remove heat when solder flows into center conductor. Apply only enough solder to join wires together. Individual wires should be coated with solder yet their shape visible. See figure 6.

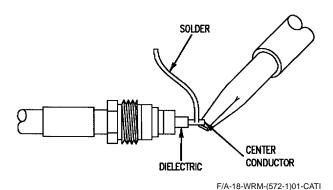
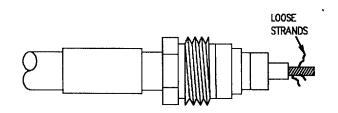
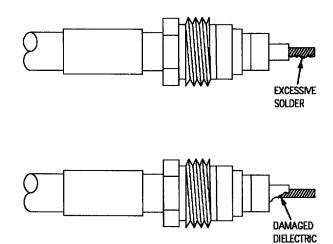


Figure 6. Tinning Center Conductor

- d. The below conditions are unacceptable: See figure 7.
 - (1) Individual wires not joined to center conductor.
 - (2) Excessive solder.
 - (3) Damaged dielectric.



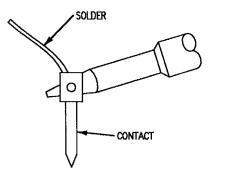


F/A-18-WRM-(573-1)01-CATI

Figure 7. Unacceptable Conditions
After Tinning

13. SOLDERING CONTACT TO CENTER CONDUCTOR.

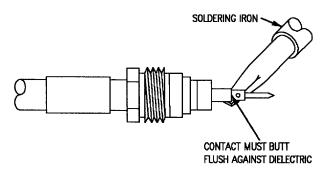
- a. Clean and tin soldering iron.
- b. Apply heat to contact solder cup and fill cup with solder. Avoid getting solder on outside of contact. See figure 8.



F/A-18-WRM-(574-1)01-CATI

Figure 8. Filling Solder Cup

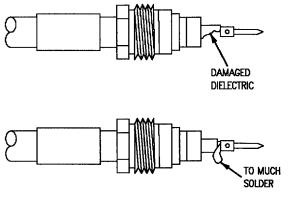
c. Position contact on center conductor and apply heat to solder cup. When solder melts, slide contact over center conductor. Remove heat as soon as solder flows between center conductor and contact. Hold cable and contact steady until solder hardens. See figure 9.



F/A-18-WRM-(575-)01-CATI

Figure 9. Soldering Contact to Center Conductor

- d. Inspect solder joint. Solder should be shiny and flow smoothly from center conductor to contact. The below conditions are unacceptable. See figure 10.
 - (1) Damaged dielectric.
 - (2) Too much solder.



F/A-18-WRM-(576-1)01-CATI

Figure 10. Unacceptable Conditions After Soldering Contact

14. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

15. **DIE INSTALLATION.**

- a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 11.
- b. Close handle to make sure dies are seated and locked in place.

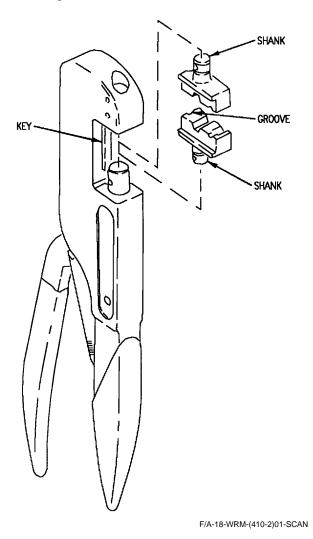


Figure 11. Die Installation

16. CRIMP PROCEDURE.

- a. Position crimping material in correct cavity of dies. See figure 12.
 - b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove terminal and wire assembly and inspect crimp.

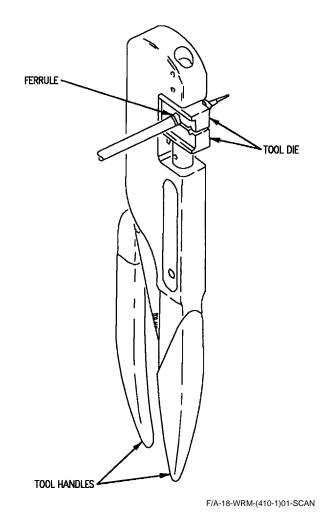


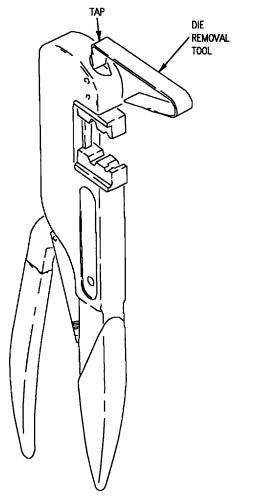
Figure 12. Crimping Operation

17. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 13.



F/A-18-WRM-(410-3)01-SCAN

Figure 13. Upper Die Removal

b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.

c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 14.

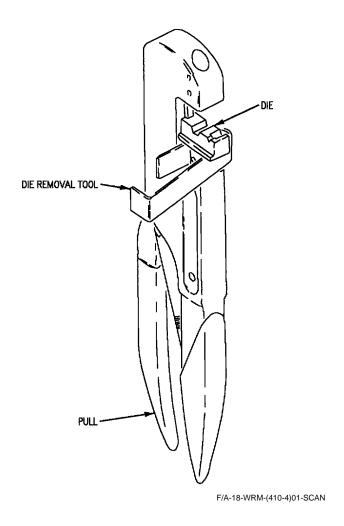


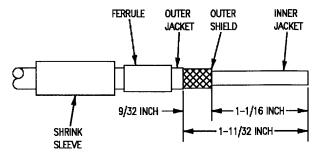
Figure 14. Lower Die Removal

d. Pull handle open with a snap action. The die will be released from the lock spring and can then be removed by hand.

CAUTION

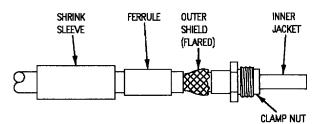
To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

1. Using 45-123 wire cutters, cut end of cable square. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-163 for cable with 9/32-inch between blades (see paragraph 5). Strip outer jacket 1-11/32 inch and outer shield 1-1/16 inch.



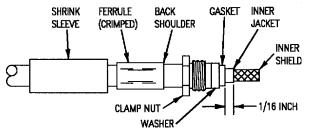
F/A-18-WRM-(279-1)02-CATI

2. Slide clamp nut over inner jacket and under outer shield until shield butts against shoulder on clamp nut.



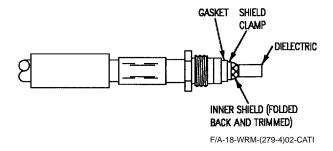
F/A-18-WRM-(234-1)02-CATI

3. Slide ferrule forward over shield against back shoulder of clamp nut. Using M22520/05-19 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 14). Slide washer and gasket over inner jacket and against clamp nut, adjust cable stripper 45-163 for inner jacket (see paragraph 5). Strip all but 1/16-inch of inner jacket.



F/A-18-WRM-(234-2)02-CATI

4. Slide shield clamp over inner jacket with flat side against gasket. Fold shield back and trim even with edge of shield clamp.

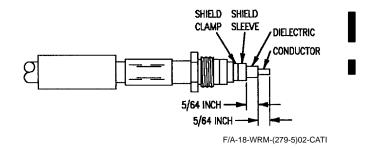


5. Slide shield sleeve over dielectric and against shield clamp.

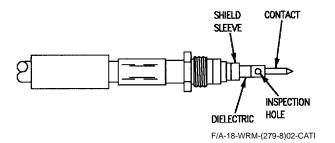


To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

6. Using sharp knife, remove all but 5/64-inch of dielectric. Using 45-123 wire cutters cut center conductor to leave 5/64-inch. Using W60-3 soldering iron, tin center conductor (see paragraph 12).



7. Using W60-3 soldering iron, solder contact to conductor (see paragraph 13).



8. Slide shrink sleeve over ferrule until it butts against clamp nut.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

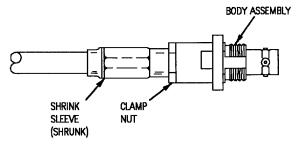
Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

9. Shrink sleeve using heat tool and nitrogen servicing unit.



To prevent damage to connectors, rotate body assembly only when assembled.

10. While holding hex nut, screw body assembly onto hex nut. Using torque wrench torque body assembly 13 to 18 inch-pounds.

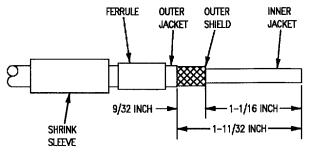


F/A-18-WRM-(234-3)02-CATI

CAUTION

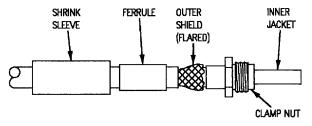
To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

1. Using 45-123 wire cutters cut end of cable square. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-163 for cable with 9/32-inch between blades (see paragraph 5). Strip outer jacket 1-11/32 inch and outer shield 1-1/16 inch.



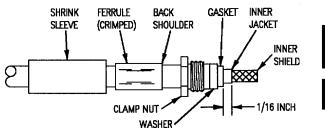
F/A-18-WRM-(279-1)02-CATI

2. Slide clamp nut over inner jacket and under outer shield until shield butts against shoulder on clamp nut.



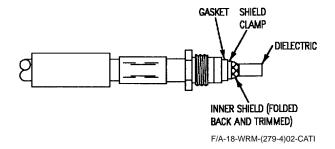
F/A-18-WRM-(234-1)02-CATI

3. Slide ferrule forward over shield against back shoulder of clamp nut. Using M22520/05-19 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 14). Slide washer and gasket over inner jacket and against clamp nut, adjust cable stripper 45-163 for inner jacket (see paragraph 5). Strip all but 1/16-inch of inner jacket.



F/A-18-WRM-(234-2)02-CATI

4. Slide shield clamp over inner jacket with flat side against gasket. Fold shield back and trim even with edge of shield clamp.

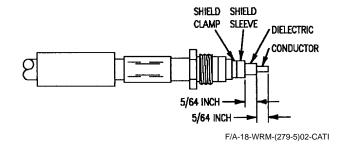


5. Slide shield sleeve over dielectric and against shield assembly.



To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

6. Using sharp knife, remove all but 5/64-inch of dielectric. Using 45-123 wire cutters cut center conductor to leave 5/64-inch. Using W60-3 soldering iron, tin center conductor (see paragraph 12).



7. Using W60-3 soldering iron, solder contact to conductor (see paragraph 13).

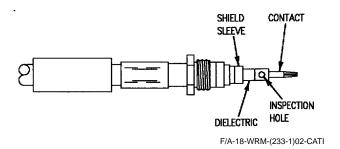


Figure 16. 4811-0903, 4811-0905, 4816-0903 and 4816-0905 Triaxial Connector Repair (Sheet 2) 8. Slide shrink sleeve over ferrule until it butts against clamp nut.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

9. shrink sleeve using heat tool and nitrogen servicing unit.



To prevent damage to connectors, rotate body assembly only when assembled.

10. While holding hex nut, screw body assembly onto hex nut. Using torque wrench torque body assembly 13 to 18 inch-pounds.

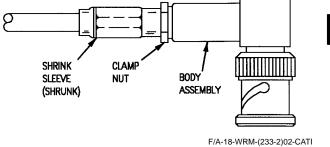
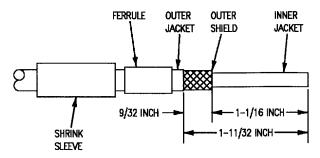


Figure 16. 4811-0903, 4811-0905, 4816-0903 and 4816-0905 **Triaxial Connector Repair (Sheet 3)**

CAUTION

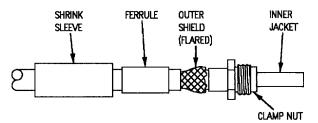
To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

1. Using 45-123 wire cutters, cut end of cable square. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-163 for cable with 9/32-inch between blades (see paragraph 5). Strip outer jacket 1-11/32 inch and outer shield 1-1/16 inch.



F/A-18-WRM-(279-1)02-CATI

2. Slide clamp nut over inner jacket and under outer shield until shield butts against shoulder on clamp nut.



F/A-18-WRM-(234-1)02-CATI

3. Slide ferrule forward over shield against back shoulder of clamp nut. Using M22520/05-19 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 14). Slide washer and gasket over inner jacket and against clamp nut, adjust cable stripper 45-163 for inner jacket (see paragraph 5). Strip all but 1/16-inch of inner jacket.

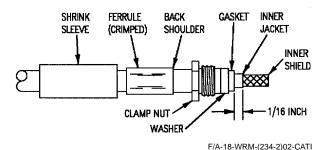
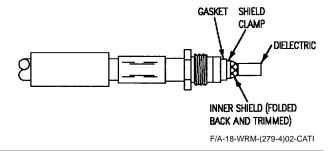


Figure 17. 4846-0903 and 4846-0905 Triaxial Connector Repair (Sheet 1)

4. Slide shield clamp over inner jacket with flat side against gasket. Fold shield back and trim even with edge of shield clamp.

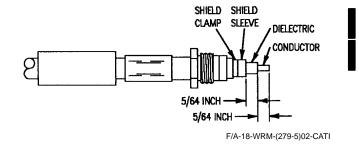


5. Slide shield sleeve over dielectric and against shield clamp.

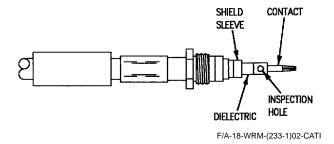


To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

6. Using sharp knife, remove all but 5/64-inch of dielectric. Using 45-123 wire cutters cut center conductor to leave 5/64-inch. Using W60-3 soldering iron, tin center conductor (see paragraph 12).



7. Using W60-3 soldering iron, solder contact to conductor (see paragraph 13).



8. Slide shrink sleeve over ferrule until it butts against clamp nut.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

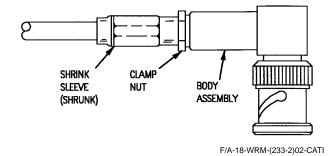
Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

9. Shrink sleeve using heat tool and nitrogen servicing unit.



To prevent damage to connectors, rotate body assembly only when assembled.

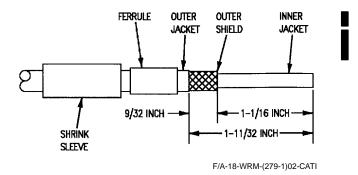
10. While holding hex nut, screw body assembly onto hex nut. Using torque wrench torque body assembly 13 to 18 inch-pounds.



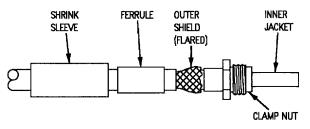
CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

1. Using 45-123 wire cutters, cut end of cable square. Slide shrink sleeve and ferrule over cable. Adjust cable stripper 45-163 for cable with 9/32-inch between blades (see paragraph 5). Strip outer jacket 1-11/32 inch and outer shield 1-1/16 inch.

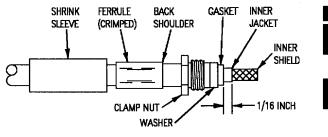


2. Slide clamp nut over inner jacket and under outer shield until shield butts against shoulder on clamp nut.



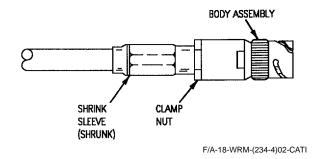
F/A-18-WRM-(234-1)02-CATI

3. Slide ferrule forward over shield against back shoulder of clamp nut. Using M22520/05-19 die set and M22520/5-01 crimping tool frame, crimp ferrule in "A" cavity of die set (see paragraph 14). Slide washer and gasket over inner jacket and against clamp nut, adjust cable stripper 45-163 for inner jacket (see paragraph 5). Strip all but 1/16-inch of inner jacket.



F/A-18-WRM-(234-2)02-CATI

4. Slide shield clamp over inner jacket with flat side against gasket. Fold shield back and trim even with edge of shield clamp.

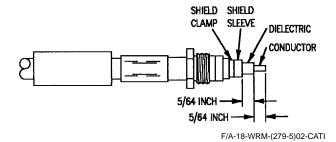


5. Slide shield sleeve over dielectric and against shield clamp.



To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

6. Using sharp knife, remove all but 5/64-inch of dielectric. Using 45-123 wire cutters cut center conductor to leave 5/64-inch. Using W60-3 soldering iron, tin center conductor (see paragraph 12).



7. Using W60-3 soldering iron, solder contact to conductor (see paragraph 13).

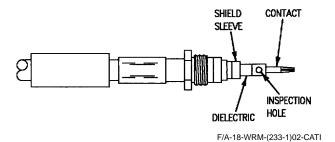


Figure 18. 4806-0903 and 4806-0905 Triaxial Connector Repair (Sheet 2)

8. Slide shrink sleeve over ferrule until it butts against clamp nut.

WARNING

To prevent death or injury to personnel, conventional hot air guns must not be used on fueled aircraft. Exposed heating elements may cause fire or explosion.

Use of nitrogen with heat tool in an enclosed area is hazardous. Discharge of nitrogen into a poorly ventilated area such as wheel wells, stand-up bays, or crew stations can result in asphyxiation.

9. Shrink sleeve using heat tool and nitrogen servicing unit.



To prevent damage to connectors, rotate body assembly only when assembled.

10. While holding hex nut, screw body assembly onto hex nut. Using torque wrench torque body assembly 13 to 18 inch-pounds.

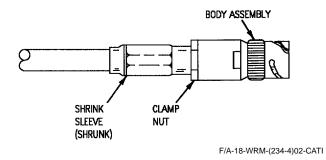


Figure 18. 4806-0903 and 4806-0905 Triaxial Connector Repair (Sheet 3)

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

BJ8-12EXX-XXX (MIL-C-83723 SERIES 3)

WITH TAPE WRAPPED THERMAL BARRIER PROTECTIVE BOOT INSTALLATION CONNECTOR REPAIR

Reference Material

Avionics Cleaning and Corrosion Prevention Control	NAVAIR 16-1-540
Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00
Wire Type List	WP004 00

Alphabetical Index

Subject	Page No.
Adapter Tool Mating, Figure 2	5
Assemble Inner Ferrule in Sleeve Assembly, Figure 41	33
Assemble Sleeve Assembly on Connector, Figure 40	33
Backshell Disassembly Procedure	9
BJ8-12E12-12SD Connectors, Figure 50	40
BJ8-12E18-31SD and BJ8-12E18-31D06 Connectors, Figure 51	41
Broken Wire Contact Removal, Figure 37	29
Broken Wire Contact Removal from Connector	28
CM Adapter Tool Numbering System, Figure 1	4
CM Adapter Tools	4
Contact Crimping	20
Contact Crimping, Figure 26	21
Corrosion Control	16
Crimp Tool Handle M22520/1-01 Assembly and Adjustments	18
Adjusting Turret Head Before Crimping	19
Removal and Installation of Turret Head	18
Setting Selector Knob Using Turret Head	20
Description	3
Extracting Contact from Connector, Figure 35	27
Holding Connector Face With T Handle and Adapter, Figure 10	11
Hot Spotz Tape, Table 4	38
Hot Spotz Tape Removal, Figure 8	10
Inserting Contact into Insertion Tool, Figure 28	23
Inserting Contacts into Connector, Figure 29	23

Alphabetical Index (Continued)

Subject	Page No
Inserting Sealing Plugs into Connector, Figure 30	24
Insertion of Contact into Connector	22
Inspection of Crimped Contact, Figure 27	22
Install Clamp Assembly, Figure 47	37
Install Outer Ferrule, Figure 45	36
Installation of Reinforced Silicone Rubber Tape, Figure 42	34
Loosening Position of Wrench, Figure 5	8
Loosening Screws on Saddle Clamp, Figure 9	10
Materials Required	3
M22520/1-01 Crimp Tool Handle and Turret Head, Figure 24	19
Permacel Tape, Table 5	39
Permacel Tape Boot Removal, Figure 7	9
Placing Wire in Slot of Stripping Tool, Figure 20	17
Procedure	4
Pull Outer Ferrule and Slide Back onto Wire Bundle, Figure 14	13
Reassembly Procedure	32
Reference Designation to Figure Number Index	3
Reinforced Silicone Rubber Tape, Table 2	34
Reinforced Silicone Rubber Tape Buildup to Fill Clamp Assembly, Figure 46	37
Removal Tool on Wire, Figure 31	25
Remove Reinforced Silicone Rubber Tape Buildup, Figure 13	13
Remove Teflon Barrier Tape Boot, Figure 19	16
Remove Teflon Barrier Tape, Figure 15	14
Remove Wire Mesh Tape, Figure 16	14
Removing Contact from Connector, Figure 33	26
Removing Insulation, Figure 21	17
Removing Inner Ferrule, Figure 17	15
Securing Hot Spotz Tape Boot, Figure 48	38
Securing Permacel Tape Boot, Figure 49	39
Slip Saddle Clamp Assembly Back onto Wire Bundle, Figure 12	12
Soldering Procedure	30
Soldering Procedure, Figure 38	31
Solder Wire Mesh Tape, Figure 43	35
Spot Tie Removal, Figure 6	9
Strap Wrench	5
Strap Wrench BT-BS-601 in Position to Remove Saddle Clamp Assembly, Figure 11	12
Strap Wrench BT-BS-601 in Position to Remove Sleeve Assembly, Figure 18	15
Strap Wrench Setup and Adjustment, Figure 3	
	6
Strip Gap Check, Figure 25	20
Stripping Completed, Figure 22	18
Support Equipment Required	3
Teflon Barrier Tape, Table 1	32
Teflon Barrier Tape Wrap, Figure 39	32
Tightening Position of Wrench, Figure 4	7
Unacceptable Conditions, Figure 23	18 25
Uniocking Contact Mechanism - Figure 37	7.5

Alphabetical Index (Continued)

Subject	
Unlocking Contact Retention Mechanism of Broken Wire Contact, Figure 36	29
Unlocking Contact Retention Mechanism with Unwired Contact Removal Tool, Figure 34	27
Unwired Contact Removal from Connector	26
Wire Mesh Tape, Table 3	35
Wire Mesh Tape Wrap, Figure 44	36
Wire Preparation	16
Wired Contact Removal from Connector	24

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index



Reference Designation	Figure No.
52P-S055A	51
52P-S055B	51
52P-S055C	50
52P-T056A	51
52P-T056B	51
52P-T056C	50

1. DESCRIPTION.

- 2. The MIL-C-83723, Series 3, electrical connectors are threaded coupling, self-locking, circular environmental resistant connectors, with rear release contacts. The Series 3 connector has a 50 percent scoopproof design.
- 3. Each connector part number is supported by an illustration which represents the contact arrangement, a reference designation list and tables containing tooling and parts data.

Unwired connector cavities shall have a sealing plug installed to prevent water intrusion.

Support Equipment Required

Part Number or Type Designation	Nomenclature
3308AS100	Repair Set-Wire and
	Connector
CM-837-12-A	Adapter Tool
CM-837-18-A	Adapter Tool

Materials Required

Specification or Part Number	Nomenclature
See Table 1	Teflon Barrier Tape
See Table 2	Reinforced Silicone
	Rubber Tape
See Table 3	Wire Mesh Tape
See Table 4	Hot Spotz Tape
See Table 5	Permacel Tape
TT-I-735 Grade B	Isopropyl Alcohol
SN60WRMAP2-0-040	Solder
MIL-T-43435TYPE-4	Tape, Lacing
SIZE-3FINISH-D	
SR-98	Silicone Varnish
MMS 409	Compound, Cleaning

- 4. PROCEDURE.
- 5. **CM ADAPTER TOOLS.** CM adapter tool is shown in figure 1. Select tool part number to shell

size from tool data in reference designation to backshell data index for specific cable clamp.

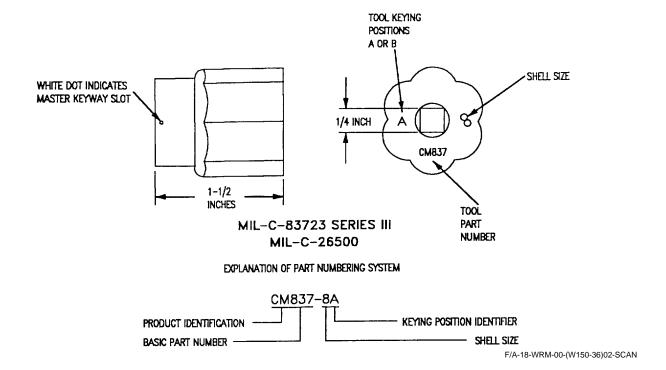
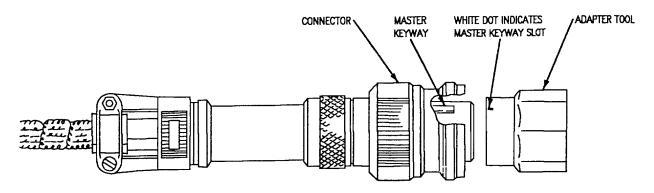


Figure 1. CM Adapter Tool Part Numbering System

CAUTION

White dot on adapter tool must be in line with master key of connector before insertion. Spinning the adapter tool onto connector until it slips into place causes unnecessary wear to tools, keys and keyways.

a. Mate adapter tool to connector. See figure 2.



F/A-18-WRM-00-(W150-37)01-SCAN

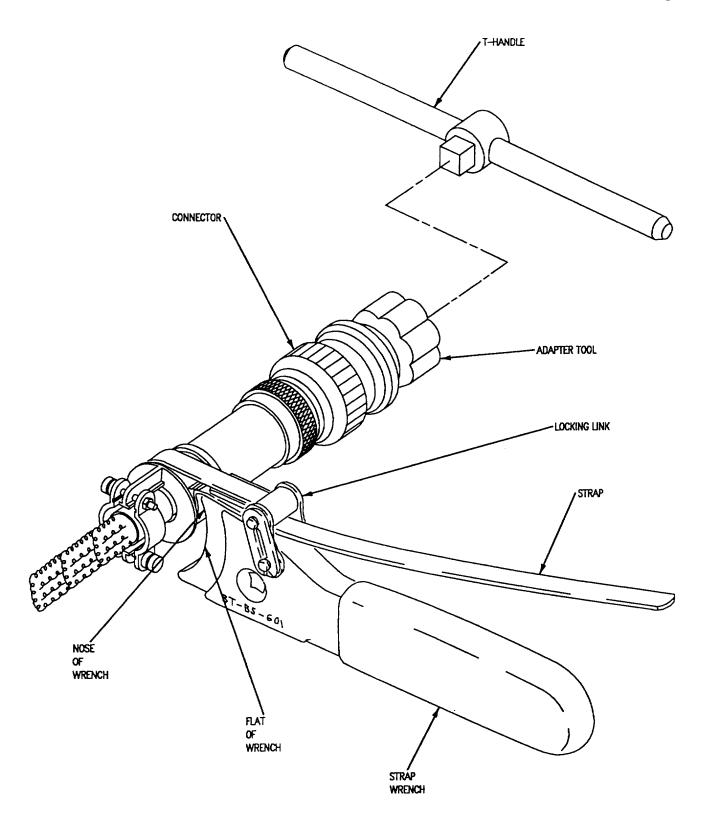
Figure 2. Adapter Tool Mating

6. STRAP WRENCH.

a. Install the strap around part to be tightened or loosened. Draw the strap tight and through the locking link so the cable clamp and strap rests on nose of wrench. See figure 3.

NOTE

T-Handle can be used for additional gripping force to adapter if required.



F/A18-WRM-(W150-38)01-SCAN

Figure 3. Strap Wrench Setup and Adjustment

b. To tighten clamp, apply force in a clockwise direction as viewed from the rear of the connector.

The clamp and strap are tucked beneath the nose of the wrench and against the flat. See figure 4.

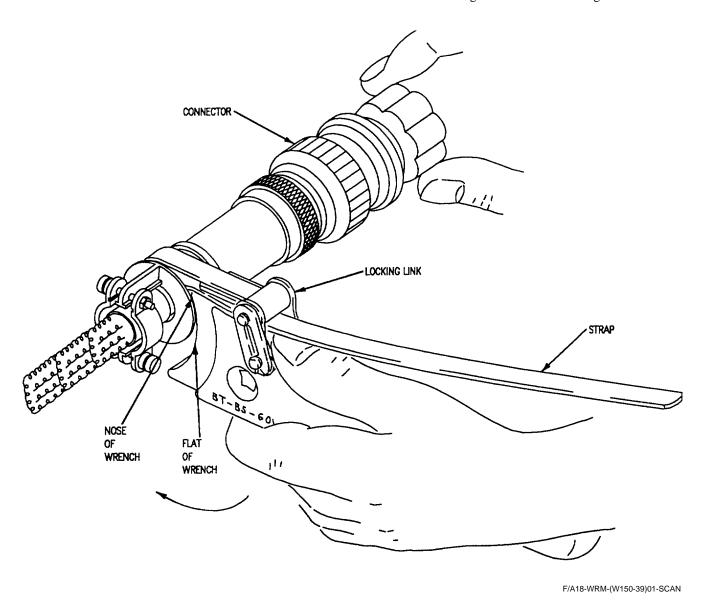


Figure 4. Tightening Position of Wrench

c. To loosen clamp, turn counterclockwise as viewed from the rear of the connector. See figure 5.

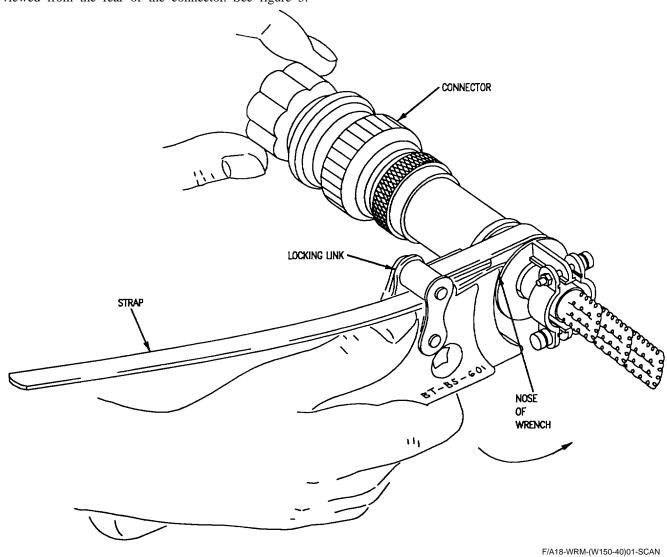


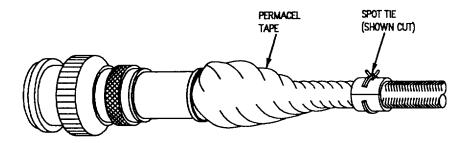
Figure 5. Loosening Position of Wrench

7. BACKSHELL DISASSEMBLY PROCEDURE.

a. Cut spot tie from permacel tape boot. See figure 6.



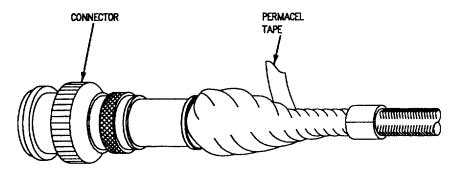
When cutting boot material with sharp tool, extreme care must be taken not to nick or scrape the wire insulation beneath the cut.



F/A-18-WRM-(W150-41)01-CATI

Figure 6. Spot Tie Removal

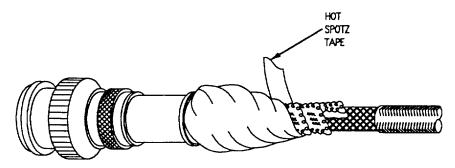
b. Unwrap or cut permacel tape and remove from the boot area. See figure 7.



F/A-18-WRM-(W150-42)01-CATI

Figure 7. Permacel Tape Boot Removal

c. Unwrap or cut hot spotz tape and remove from the boot area. See figure 8.



F/A-18-WRM-(W150-43)01-CATI

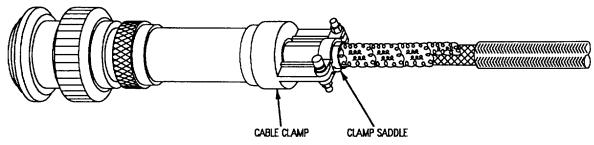
Figure 8. Hot spotz Tape Removal

NOTE

Screw backshell parts in a counterclockwise direction as viewed from rear of connector.

d. Loosen screws on clamp assembly. See figure

9.



F/A-18-WRM-(W150-1)01-CATI

Figure 9. Loosening Screws on Saddle Clamp

e. On face of connector use T wrench BT-HT-107 connected to CM-837-12-A or CM-837-18-A adapter tool. See figure 10.

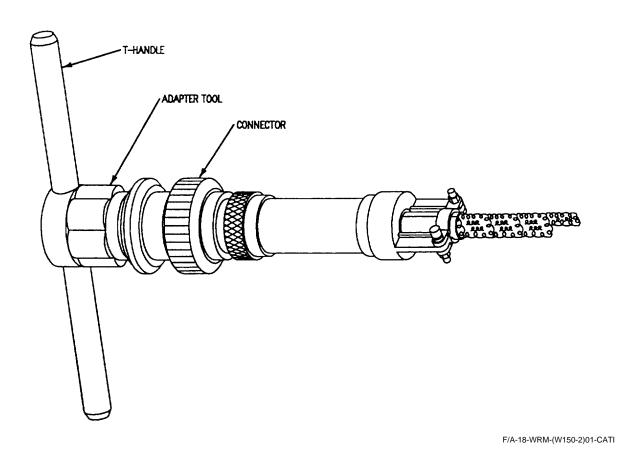


Figure 10. Holding Connector Face with T-Handle and Adapter

f. Install strap wrench BT-BS-601 on the saddle clamp assembly. See figure 11.

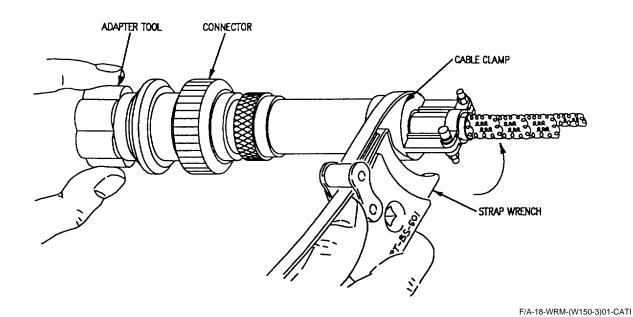


Figure 11. Strap Wrench BT-BS-601 in Position to Remove Saddle Clamp Assembly

g. Screw saddle clamp counterclockwise until loose. Slip back onto wire bundle. See figure 12.

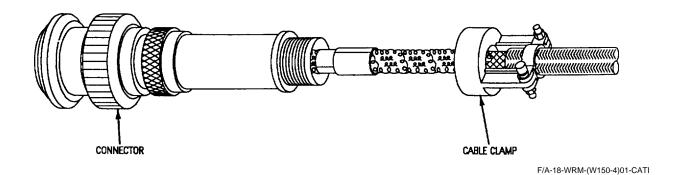
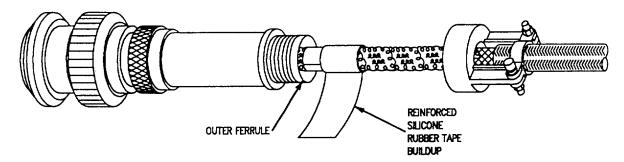


Figure 12. Slip Saddle Clamp Assembly Back onto Wire Bundle

h. Remove reinforced silicone rubber tape buildup. See figure 13.



F/A-18-WRM-(W150-5)01-CATI

Figure 13. Remove Reinforced Silicone Rubber Tape Buildup

i. Remove outer ferrule by hand. This ferrule is pressed in over shield and inner ferrule. See figure 14.

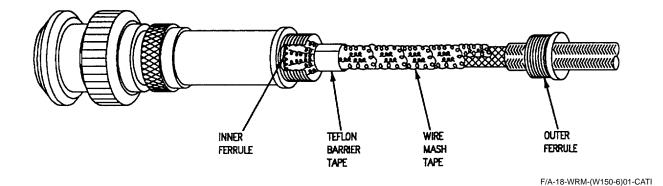


Figure 14. Pull Outer Ferrule and Slide Back onto Wire Bundle

j. Remove teflon barrier tape. See figure 15.

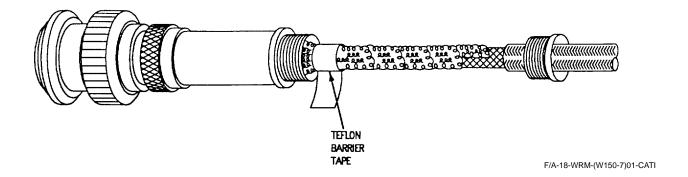


Figure 15. Remove Teflon Barrier Tape

k. Remove wire mesh tape. Use desoldering iron DS40-3 to remove solder connection. See figure 16.

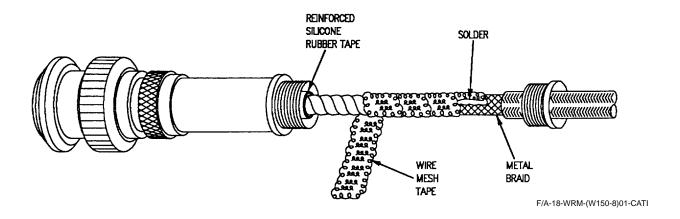


Figure 16. Remove Wire Mesh Tape

1. Remove inner ferrule by hand and slip back onto wire bundle See figure 17.

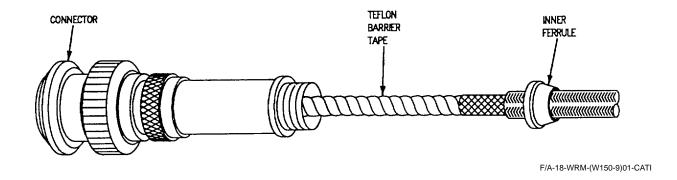


Figure 17. Removing Inner Ferrule

m. Slip sleeve assembly back by hand. If too tight, use T Wrench BT-HT-107 connected to CM-837-12-A or CM-837-18-A Adapter to hold connec-

tor. Use strap wrench to remove sleeving assembly. See figure 18.

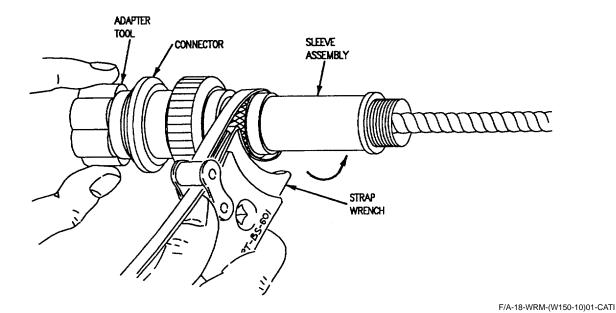
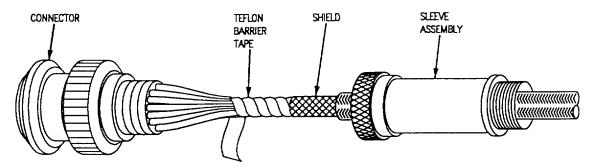


Figure 18. Strap Wrench BT-BS-601 in Position to Remove Sleeve Assembly

n. Remove teflon barrier tape. See figure 19.



F/A-18-WRM-(W150-11)01-CATI

Figure 19. Remove Teflon Barrier Tape Boot

8. CORROSION CONTROL

a. For cleaning and anti-corrosion methods, refer to NAVAIR 16-1-540.

9. WIRE PREPARATION.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

a. Cut wire to required length.

b. Find the correct connector data figure number and determine correct strip dimension from Contact Data Table. The connector data figure number is listed in the Reference Designation to Figure Number Index within this work package.

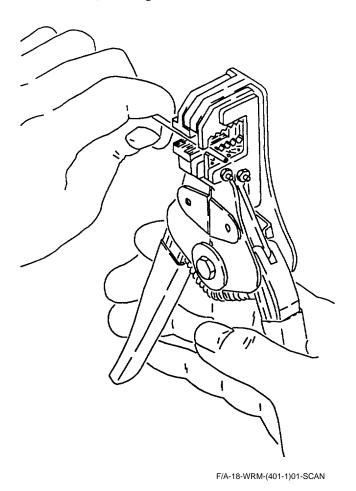
NOTE

Determine the wire types of the wire, using the applicable Cable/Wiring Assembly Data Work Package in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070.

For a detailed explanation of wire strippers see WP010 00.

c. Select the correct wire strippers for the wire by referring to the Wire Type List WP004 00 for the particular wire type used.

- d. Insert wire into exact center of correct cutting slot for wire size to be stripped (each slot is marked with wire size). See figure 20.
- e. Close handles together as far as they will go. See figure 21.



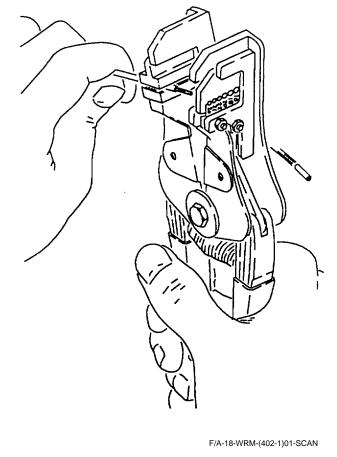
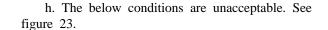


Figure 20. Placing Wire in Slot of Stripping Tool

Figure 21. Removing Insulation

f. Remove wire while releasing handles, allowing wire holder to return to open position. See figure 22.



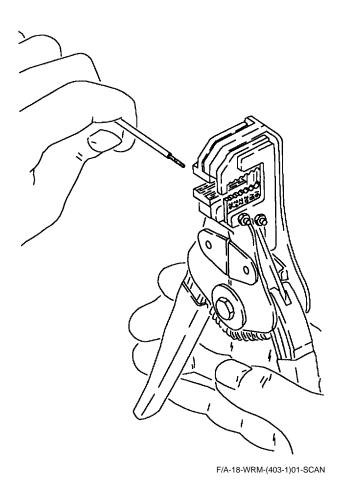


Figure 22. Stripping Completed

g. After stripping, twist strands of wire firmly together in the same direction as the normal lay of the wire.

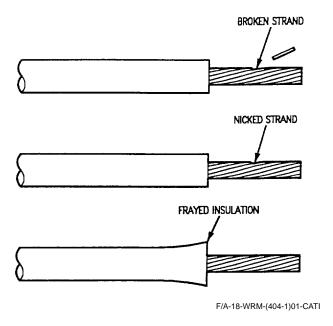


Figure 23. Unacceptable Conditions

10. CRIMP TOOL HANDLE M22520/1-01 ASSEMBLY AND ADJUSTMENTS.

NOTE

Make sure crimp tool is operating correctly by using M22520/3-1 inspection gage.

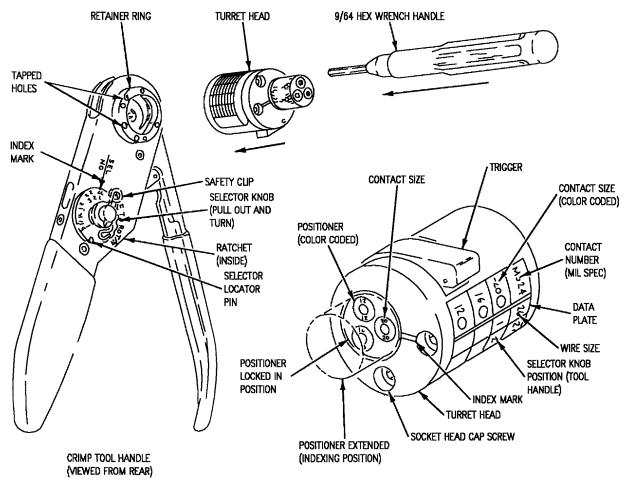
a. Find the correct connector data figure number and select specified crimp tool handle and positioner from Tool Data Table. The connector data figure number is found by locating the reference designation in the Reference Designation to Figure Number Index within this work package.

11. REMOVAL AND INSTALLATION OF TURRET HEAD.

NOTE

Crimp tool handle shall be fully open when inserting turret of positioner head and when changing selector positions.

- a Press trigger of turret head releasing positioner to extended (indexing) position. See figure 24.
- Seat turret head onto retaining ring on back of tool with socket head cap screws lined up with tapped holes.
- c. Tighten socket head screws with a 9/64 inch hex wrench.
- d. To remove turret head, loosen socket head screw until threads are disengaged from tapped holes and lift off crimp tool.



F/A-18-WRM-(405-1)01-SCAN

Figure 24. M22520/1-01 Crimp Tool Handle and Turret Head

12. ADJUSTING TURRET HEAD BEFORE CRIMPING.

- a. Press trigger on turret head releasing positioner to extended (indexing) position.
- b. Select position desired from color coded data plate on side of turret head assembly.
- c. Rotate positioners until color coded positioner is lined up with index mark.

d. Press positioner into turret head until it snaps into locked position.

13. SETTING SELECTOR KNOB USING TURRET HEAD.

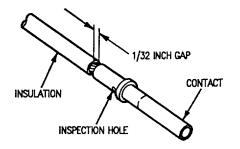
- a. Refer to data plate on turret head assembly. The correct selector number is listed below the wire size and opposite the contact size.
 - b. Remove the safety clip lock from selector knob.
- c. Raise selector knob and rotate to selector number found on data plate.
 - d. Replace safety clip.

14. CONTACT CRIMPING.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- a. Find the correct connector data figure number and select specified contact from Contact Data Table. The connector data figure number is found by locating the reference designation in the Reference Designation to Figure Number Index within this work package.
- b. Insert stripped wire into contact and make sure wire strands are visible in contact inspection hole.
- c. Inspect gap dimension between contact and insulation as shown in figure 25.



F/A-18-WRM-(406-2)01-CATI

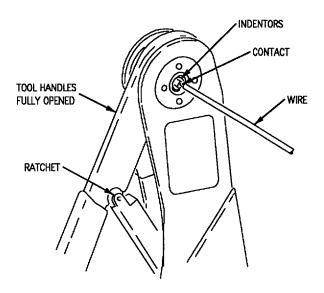
Figure 25. Strip Gap Check

d. Insert contact and wire into crimp tool indentors on front of tool until contact bottoms in positioner/turret. See figure 26, detail A.

NOTE

Crimp tool will not release until crimping cycle is completed.

e. Hold wire in place and squeeze tool handles together smoothly until ratchet releases and tool opens. See figure 26, detail B.



CRIMP TOOL HANDLE (MEWED FROM FRONT)

DETAIL A

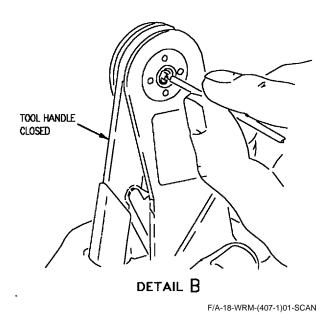
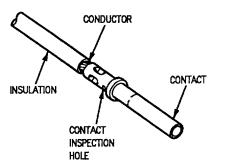


Figure 26. Contact Crimping

- f. Remove crimped contact from tool and inspect wire strands in contact inspection hole figure 27.
- (1) Two series of four indents shall grip wire and secure contact to wire.
- (2) Wire shall be visible in contact inspection hole, indicating that wire is crimped into contact at correct depth.
 - (3) There shall be no loose or nicked strands.



F/A-18-WRM-(408-2)01-CATI

Figure 27. Inspection of Crimped Contact

15. INSERTION OF CONTACT INTO CONNECTOR.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- a. If backshell requires disassembly, do the below substeps:
- (1) Determine correct connector data figure number from the Reference Designation to Figure Number Index within this work package.
- (2) To remove boot and backshell from connector, refer to backshell work package listed in Reference Work Package column of Reference Designation to Backshell Data Index.
- b. Find the correct connector data figure number and select specified insertion tool from Tool Data Table. The connector data figure number is found by locating the reference designation in the Reference Designation to Figure Number Index within this work package.

WARNING

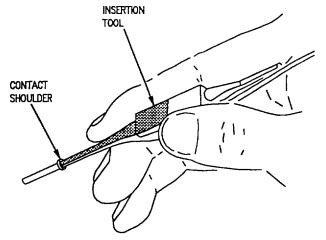
Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.

c. Isopropyl alcohol may be used as a lubricant for insertion of contacts. Apply by brushing on connector insert grommet face or by dipping tool.

d. Place wire and contact assembly into insertion tool and position tool tip over crimp barrel to butt contact shoulder. See figure 28.

CAUTION

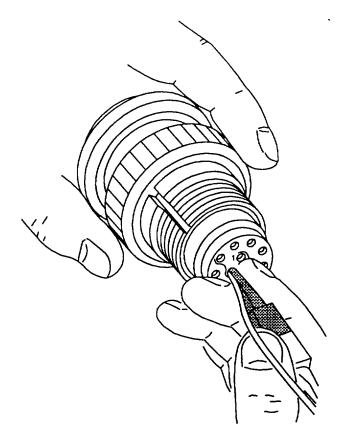
Damage may occur to contact removal tool if tilted or rotated when in connector insert.



F/A-18-WRM-(W150-12)01-SCAN

Figure 28. Inserting Contact into Insertion Tool

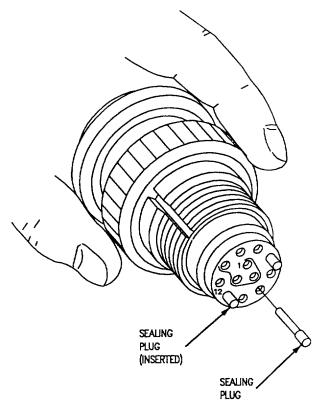
e. At right angle to connector insert, align contact with cavity in connector and press contact firmly with insertion tool to seat contact in cavity. Slight click may be heard as retention tines snap into place behind contact shoulder. See figure 29.



F/A-18-WRM-(W150-13)01-SCAN

Figure 29. Inserting Contacts into Connector

f. Remove insertion tool by pulling it straight out of contact cavity and disengage from wire. Carefully pull back on wire to make sure contact is correctly seated. g. Fill all unused contact cavities with uncrimped contacts, then insert sealing plug, small diameter first, until it bottoms against contact cavity. See figure 30.



F/A-18-WRM-(W150-14)01-SCAN

Figure 30. Inserting Sealing Plug(s) into Connector

16. WIRED CONTACT REMOVAL FROM CONNECTOR.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- a. If backshell requires disassembly, do steps in paragraph 7.
- b. Find the correct connector data figure number and select specified removal tool from Tool Data Table. The connector data figure number is found by locating the reference designation in the Reference Designation to Figure Number Index within this work package.

WARNING

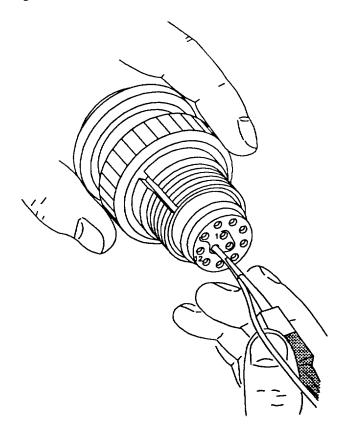
Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.



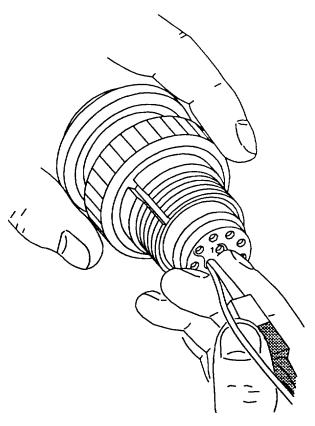
Damage may occur if contact removal tool is tilted or misaligned when in connector insert.

- c. Isopropyl alcohol may be used as a lubricant for removal of contacts. Apply by brushing on connector insert grommet face or by dipping tool.
- d. Place wire of contact to be removed into removal tool, with tool tip facing connector insert.

- e. Slide removal tool along wire at right angle to connector insert and align with contact cavity. See figure 31.
- f. Insert tool into contact cavity until tool tip bottoms against contact shoulder. See figure 32.



F/A-18-WRM-(W150-15)01-SCAN



F/A-18-WRM-(W150-16)01-SCAN

Figure 31. Removal Tool on Wire

Figure 32. Unlocking Contact Mechanism

g. Hold wire and tool and pull straight out from contact cavity. See figure 33.

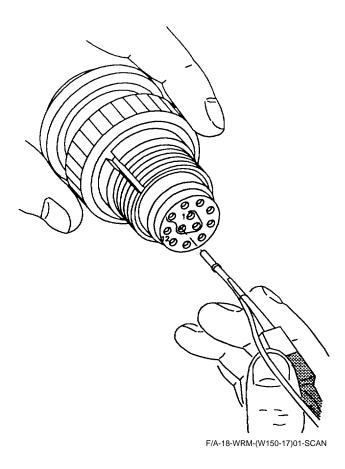


Figure 33. Removing Contact from Connector

17. UNWIRED CONTACT REMOVAL FROM CONNECTOR.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- a. If backshell requires disassembly do steps in paragraph 7.
- b. Find the correct connector data figure number and select specified unwired removal tool(s) from Tool Data Table. The connector data figure number is found by locating the reference designation in the Reference Designation to Figure Number Index within this work package.



Damage may occur if contact removal tool is tilted or misaligned when in connector insert.

c. Align unwired removal tool, at the rear and at a right angle to connector, with contact to be removed.

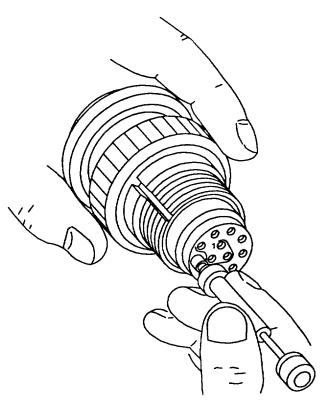
WARNING

Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.

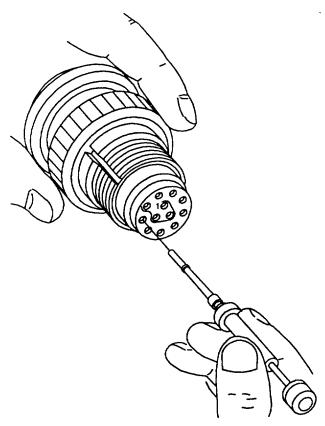
d. Isopropyl alcohol may be used as a lubricant for removal of contacts. Apply by brushing on connector insert grommet face or by dipping tool.

e. Insert unwired removal tool tip into contact cavity until it bottoms in contact cavity and releases contact retention mechanism. See figure 34.

f. Grip tool and withdraw unwired removal tool and contact from rear of the connector. See figure 35.



F/A-18-WRM-(W150-18)01-SCAN



F/A-18-WRM-(W150-19)01-SCAN

Figure 34. Unlocking Contact
Retention Mechanism with Unwired
Contact Removal Tool

Figure 35. Extracting Contact from Connector

18. BROKEN WIRE CONTACT REMOVAL FROM CONNECTOR.

CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- a. If backshell requires disassembly, do the steps in paragraph 7.
- b. Remove hardware from rear of connector and slide back over wire bundle.
- c. Find the correct Connector data figure and select specified removal tool from Tool Data Table. The connector data figure number is found by locating the reference designation in the Reference Designation to Figure Number Index within this work package.

WARNING

Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.

- d. Isopropyl alcohol may be used as a lubricant for removal of contacts. Apply by brushing on connector insert grommet face or by dipping tool.
- e. Insert tip of removal tool 1/8-inch into cavity at rear of connector.



Wire strands may be encountered at any point during tool insertion. Do not jam wire strands in contact cavity. Withdraw removal tool anytime during insertion when it cannot be advanced into connector using these procedures. Inspect tool tip for nicks, cracks, mushrooming and other damage that will prevent its functioning. Replace removal tool and repeat procedure if required.

f. Carefully insert removal tool into contact cavity in 1/16-inch increments, releasing tool after each increment if resistance is felt.

g. If resistance is felt before removal tool reaches back end of contact withdraw tool slightly, rotate 1/6 of a turn, and reinsert tool. Repeat rotation and insertion procedure until tool passes with minimal additional force and bottoms in contact cavity. See figure 36.

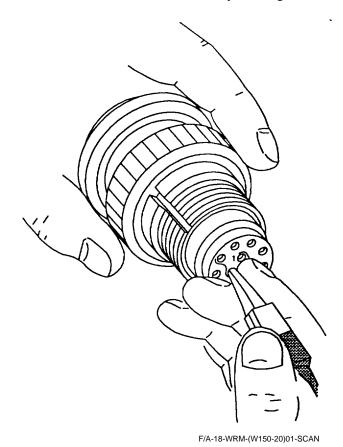
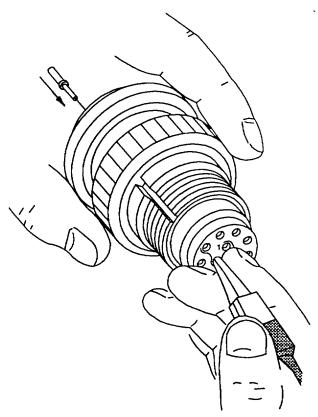


Figure 36. Unlocking Contact Retention Mechanism of Broken Wire Contact

h. Wiggle removal tool carefully to help it into contact cavity and over contact. Additional rotation may be required if broken strands are encountered.

- i. Continue insert of removal tool until positive stop is felt.
- j. Exert pressure at right angle to connector insert engaging end of contact. Using a mating contact as pusher (if contact does not move, seat removal tool more firmly). See figure 37.



F/A-18-WRM-(W150-21)01-SCAN

Figure 37. Broken Wire Contact Removal

19. SOLDERING PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

NOTE

Soldering provides a mechanical and electrical bond between metallic components. To get a good solder joint, all surfaces must be clean. The soldering iron must be clean and tinned with a thin layer of solder to conduct heat. Excessive solder on the soldering iron tip may cause solder to splash on nearby components. A damp cloth can be used to wipe excess solder and residue from soldering iron tip.

a. Clean and tin soldering iron.

WARNING

Cleaning compound is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection required. Avoid repeated/prolonged contact. Use only in well ventilated areas. Keep away from open flames or other sources of ignition.

b. Clean wire mesh tape and cable metal braid with cleaning compound.

c. Hold wire mesh tape and metal braid together, heat wire mesh tape and metal braid with soldering iron until solder flows. See figure 38.

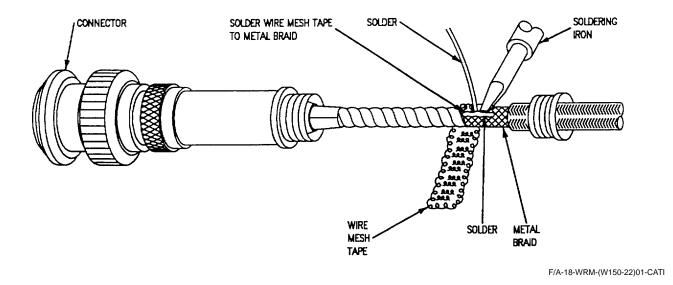
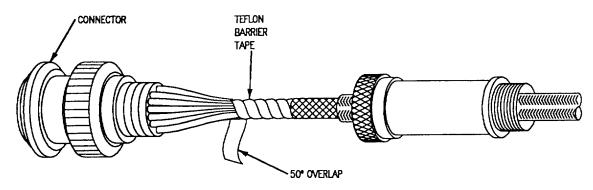


Figure 38. Soldering Procedure

20. REASSEMBLY PROCEDURE.

a. Wrap wire bundle with a fifty percent overlap of teflon barrier tape (Table 1). See figure 39.



F/A-18-WRM-(W150-23)01-CATI

Figure 39. Teflon Barrier Tape Wrap

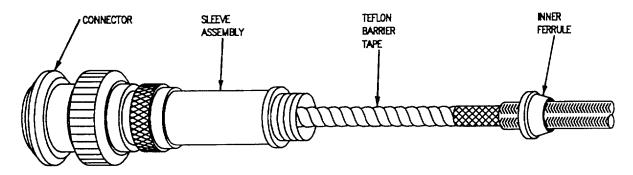
Table 1. Teflon Barrier Tape

PART NUMBER	CAGE	WIDTH (INCH)
MIL-I-23594, TYPE2, 0.500IN.	81349	1/2

TAPE COMES IN ROLLS. COLOR-WHITE OR BROWN

TEMPERATURE RANGE: -130° TO +500°F

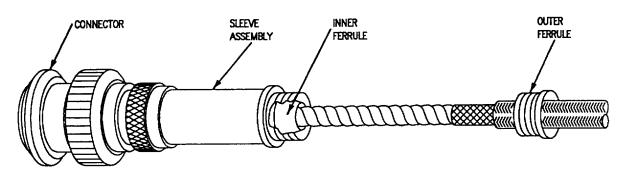
b. Slip sleeve assembly forward to connector and tighten clockwise by hand. See figure 40.



F/A-18-WRM-(W150-24)01-CATI

Figure 40. Assemble Sleeve Assembly on Connector

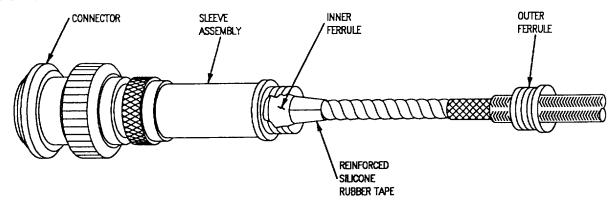
c. Slip inner ferrule forward and inside of sleeve assembly by hand. See figure 41.



F/A-18-WRM-(W150-25)01-CATI

Figure 41. Assemble Inner Ferrule in Sleeve Assembly

d. Buildup reinforced silicone rubber tape (Table 2) as necessary to make inner ferrule fit correctly. See figure 42.



F/A-18-WRM-(W150-26)01-CATI

Figure 42. Installation of Reinforced Silicone Rubber Tape

Table 2. Reinforced Silicone Rubber Tape

PART NUMBER	CAGE	WIDTH (INCH)
S-80	07099	1/2
S-5025	07099	1/2

REINFORCED WITH FIBERGLASS

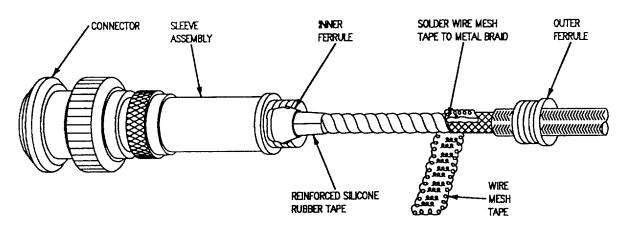
SELF BONDING

TAPE COMES IN ROLLS

COLOR - BLACK

TEMPERATURE RANGE; -178° TO +500°F

e. Solder wire mesh tape (Table 3) to wire bundle shield. Refer to paragraph 19. See figure 43.



F/A-18-WRM-(W150-27)01-CATI

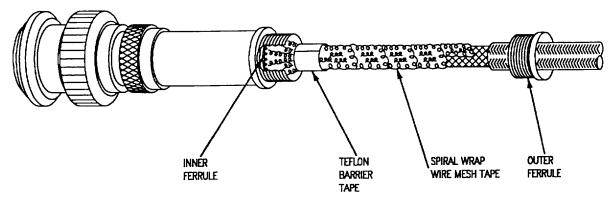
Figure 43. Solder Wire Mesh Tape

Table 3. Wire Mesh Tape

Part Number	CAGE	Width (Inch) Nominal
SC61298	OBKF2	1.000

TAPE COMES IN ROLLS OUTSIDE DIAMETER 3 INCHES. TEMPERATURE RANGE -65° TO +300°F

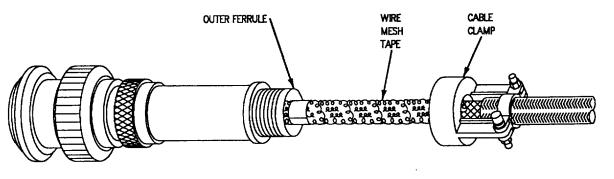
f. Wrap wire mesh tape with a fifty percent overlap, to inner ferrule. Secure end of wire mesh tape wrap with teflon barrier tape. See figure 44.



F/A-18-WRM-(W150-28)01-CATI

Figure 44. Wire Mesh Tape Wrap

g. Slip outer ferrule into sleeve assembly, over wire mesh tape and inner ferrule by hand. See figure 45.



F/A-18-WRM-(W150-29)01-CATI

Figure 45. Install Outer Ferrule

h. Buildup wire bundle behind sleeve assembly, with reinforced silicone rubber tape See figure 46.

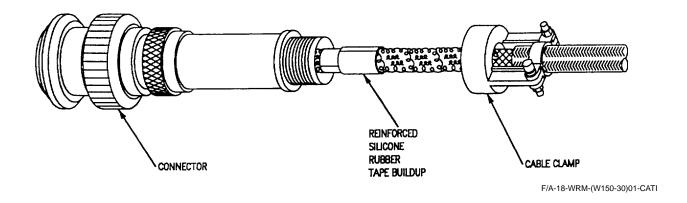


Figure 46. Reinforced Silicone Rubber Tape Buildup to Fill Clamp Assembly

i. Slip clamp assembly into sleeve assembly. Rotate clamp assembly clockwise until clamp assembly is hand tight. Tighten screws on clamp. See figure 47.

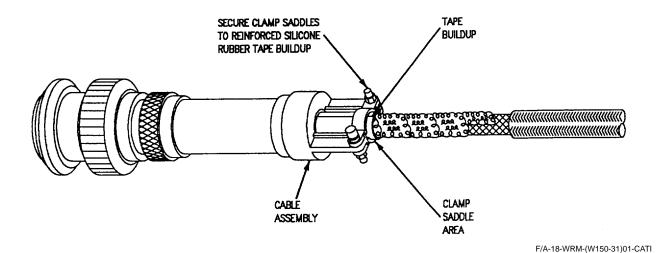
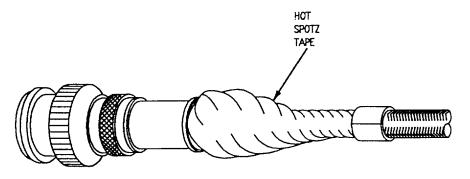


Figure 47. Install Clamp Assembly

j. Wrap Hot Spotz (thermal barrier) tape (Table 4) one complete turn around connector backshell, do not cover backshell drain holes. Continue wrapping with a 50% overlap. Wrap back over exposed wiring onto

harness braid about 1/2 inch. Terminate tape by wrapping one full turn around and perpendicular to cable axis. See figure 48.



F/A-18-WRM-(WRM-32)01-CATI

Figure 48. Securing Hot Spotz Tape Boot

Table 4. Hot Spotz Tape

PART NUMBER	CAGE	WIDTH (INCH)
AF100A	62088	1
AF150A	62088	1 1/2

TAPE COMES IN ROLLS COLOR - SILVER

TEMPERATURE RANGE; -178° TO +500°F

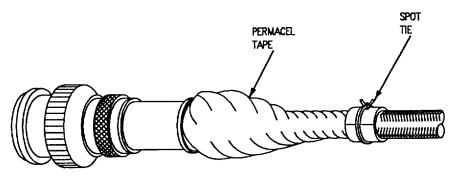
NOTE

Wrap permacel tape in same direction as hot spotz tape was applied.

k. Wrap permacel tape (Table 5) over hot spotz tape beginning with one complete turn around connector backshell, do not cover backshell drain holes. Con-

tinue wrapping with a 50% overlap, ending wrap where hot spotz tape ended. Terminate tape by wrapping one full turn around and perpendicular to cable axis.

1. Secure in place with spot tie lacing tape. After tying tape, apply enough silicone varnish to secure knot and cover the cut ends. See figure 49.



F/A-18-WRM-(W150-33)01-CATI

Figure 49. Securing Permacel Tape Boot

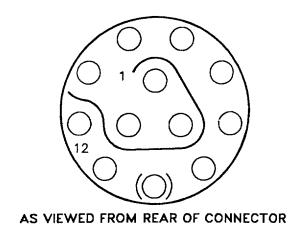
Table 5. Permacel Tape

PART NUMBER	CAGE	WIDTH (INCH)
2650	32132	1

SELF BONDING TAPE COMES IN ROLLS

COLOR - RED

TEMPERATURE RANGE; -178° TO +500° F



F/A-18-WRM-(W150-34)01-CATI

Reference Designation to Backshell Data Index for BJ8-12E12-12SD Connector

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	
52P-S055C	MS3437C13S	This WP	
52P-T056C	MS3437C13S	This WP	

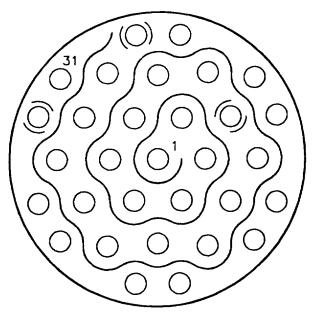
Table 1. Tool Data

ITEM	TOOL NUMBER	
Crimp Tool Handle	M22520/1-01	
Positioner	M22520/2-02	
Insertion Tool (Red)	M81969/14-02	
Removal Tool (White)	M81969/14-02	
Removal Tool (Unwired)	DRK110-1SA	
Removal Tool Probe (Red)	DRK110-20-2	

Table 2. Contact Data

CONTACT	STRIP DIMENSION (+1/32 INCH)	CONTACT PART NO.	SEALING PLUG PART NO.
1 THRU 12	7/32	M39029/5-115	MS27488-20

Figure 50. BJ8-12E12-12SD Connector



AS VIEWED FROM REAR OF CONNECTOR

F/A-18-WRM-(W150-35)01-CATI

Reference Designation to Backshell Data Index for BJ8-12E18-31SD Connector

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	
52P-S055A	MS3437C25S	This WP	
52P-T056A	S2015-18R30SD	This WP	

Reference Designation to Backshell Data Index for BJ8-12E18-31SD06 Connector

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE	
52P-S055B	MS3437C25S	This WP	
52P-T056B	S2015-18R30SD	This WP	

Table 1. Tool Data

ITEM	TOOL NUMBER	
Crimp Tool Handle	M22520/1-01	
Positioner	M22520/2-02	
Insertion Tool (Red)	M81969/14-02	
Removal Tool (White)	M81969/14-02	
Removal Tool (Unwired)	DRK110-1SA	
Removal Tool Probe (Red)	DRK110-20-2	

Figure 51. BJ8-12E18-31SD and BJ8-12E18-31D06 Connectors (Sheet 1)

Table 2. Contact Data

CONTACT	STRIP DIMENSION (+1/32 INCH)	CONTACT PART NO.	SEALING PLUG PART NO.
1 THRU 31	7/32	M39029/5-115	MS27488-20

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE WIRING REPAIR WITH PARTS DATA

L22TF96PN1 AND L22TF96S8N1 (MIL-C-83723) MULTI-PIN TRIAX CONNECTOR REPAIR

Reference Material

Avionics Cleaning and Corrosion Prevention Control	NAVAIR 16-1-540
Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00
Wire Type List	WP004 00

Alphabetical Index

Subject	Page No.
Corrosion Control	3
Crimping Operation, Figure 12	10
Crimp Tool M22520/5-01 Assembly and Use	10
Crimp Procedure	10
Die Installation	10
Die Removal	11
Description	2
Die Installation, Figure 11	10
Distance Adjustment, Figure 7	8
Extracting Wired Triaxial Contact from Connector, Figure 6	7
Inserting Sealing Plug(s) into Connector, Figure 3	5
Inserting Triaxial Contact into Insertion Tool, Figure 1	4
Inserting Triaxial Contact into Connector, Figure 2	4
Insertion of Triaxial Contact into Connector	3
Jacket Cut Adjustment, Figure 8	8
Lower Die Removal, Figure 14	11
L22TF96PN1 Connectors, Figure 15	12
L22TF96S8N1 Connectors, Figure 17	16
Materials Required	2
Operation, Figure 10	9
Reference Designation to Figure Number Index	2
Removing Triaxial Contact from Connector, Figure 5	6
Repair Procedure	3
Shield Cut Adjustment, Figure 9	9
Support Equipment Required	2
Triaxial Cable Strippers 45-163 Adjustment and Use	8
Cut Adjustment	8

Alphabetical Index (Continued)

Subject	Page No
Distance Adjustment	8
Use	9
Triaxial Contact Removal from Connector	5
Triax Repair Procedures	7
Unlocking Triaxial Contact Mechanism, Figure 4	6
Upper Die Removal, Figure 13	11
Wire Preparation	3
902-5020-2 Triaxial Assembly Procedure, Figure 16	13
902-5019-2 Triaxial Assembly Procedure, Figure 18	17

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index



Designation	Figure No.
80P-L018	15
80J-L018	17

Unwired connector cavities shall have a sealing plug installed to prevent water intrusion.

1. DESCRIPTION.

Reference

2. The L22TF96PN1 and L22TF96S8N1 are circular environmental resistant type plugs with a temperature range of -85° to +257°F and contain triax pins.

3. Each connector part number is supported by an illustration which represents the contact arrangement, a reference designation list and tables containing tooling and parts data.

Support Equipment Required

Type Designation	Nomenclature
3308AS100	Repair Set-Wire and
	Connector

Part Number or

Materials Required

Specification or Part Number	Nomenclature	
TT-I-735 GRADE B	Alcohol, Isopropyl	

4. CORROSION CONTROL.

a. For cleaning and anticorrosion methods, refer to NAVAIR 16-1-540.

5. REPAIR PROCEDURE.

- a. If backshell requires disassembly, do the substeps below:
- (1) Determine correct connector data figure number from the Reference Designation to Figure Number Index within this work package.
- (2) To remove boot and backshell from connector, refer to backshell work package listed in Reference Work Package column of Reference Designation to Backshell Data Index.

6. WIRE PREPARATION.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00 respectively. When electrical power is off, 24vdc battery voltage exists in some wiring.

- a. Cut wire to required length.
- b. Determine correct strip dimension in table 2 contact data in the correct connector data figure number. The connector figure number is listed in the Reference Designation to Figure Number Index within this work package.

NOTE

Determine the wire types of the wire, using the applicable Cable/Wiring Assembly Data Work Package in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070.

For a detailed explanation of wire strippers see WP010 00.

c. Select the correct wire strippers for the wire by referring to the Wire Type List WP004 00 for the particular wire type used.

7. INSERTION OF TRIAXIAL CONTACT INTO CONNECTOR.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- a. If backshell requires disassembly, do the below substeps:
- (1) Determine correct connector data figure number from the Reference Designation to Figure Number Index within this work package.
- (2) To remove boot and backshell from connector, refer to backshell work package listed in Reference Work Package column of Reference Designation to Backshell Data Index.
- b. Select insertion tool specified in table 1 Tool Data in the correct connector data figure number. The connector data figure number is found by locating the reference designation in the Reference Designation to Figure Number Index within this work package.

WARNING

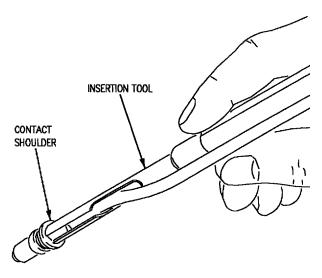
Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.

c. Isopropyl alcohol may be used as a lubricant for removal of contacts. Apply by brushing on connector insert grommet face or by dipping tool.

d. Place wire and contact assembly into insertion tool and position tool tip over crimp barrel to butt contact shoulder. See figure 1.

CAUTION

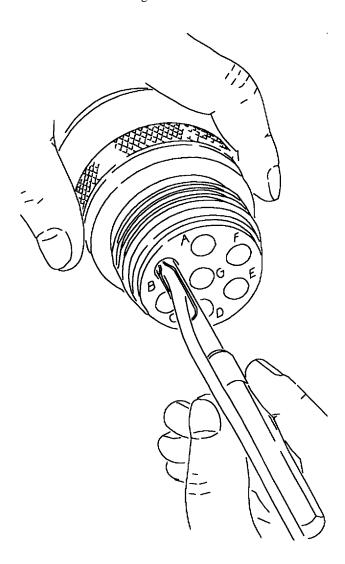
Damage may occur to contact removal tool if tilted or rotated when in connector insert.



F/A-18-WRM-(761-1)02-SCAN

Figure 1. Inserting Triaxial Contact into Insertion Tool

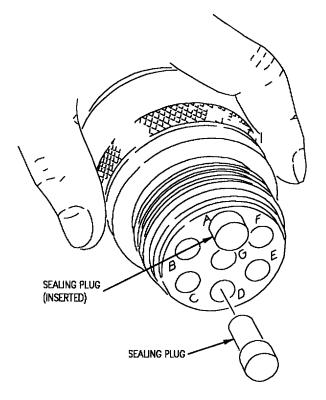
e. At right angle to connector insert, align contact with cavity in connector and press contact firmly with insertion tool to seat contact in cavity. Slight click may be heard as retention tines snap into place behind contact shoulder. See figure 2.



F/A-18-WRM-(762-1)02-SCAN

Figure 2. Inserting Triaxial Contact into Connector

- f. Remove insertion tool by pulling it straight out of contact cavity and disengage from wire. Carefully pull back on wire to make sure contact is correctly seated.
- g. Fill all unused contact cavities with sealing plug small diameter first, until it bottoms against contact cavity. See figure 3.



F/A-18-WRM-(762-2)02-SCAN

Figure 3. Inserting Sealing Plug(s) into Connector

8. TRIAXIAL CONTACT REMOVAL FROM CONNECTOR.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- a. If backshell requires disassembly, do the substeps below:
- (1) Determine correct connector data figure number from the Reference Designation to Figure Number Index within this work package.
- (2) To remove boot and backshell from connector, refer to backshell work package listed in Reference Work Package column of Reference Designation to Backshell Data Index.
- b. Select removal tool specified in table 1 Tool Data in the correct connector data figure number. The connector data figure number is found by locating the reference designation in the Reference Designation to Figure Number Index within this work package.



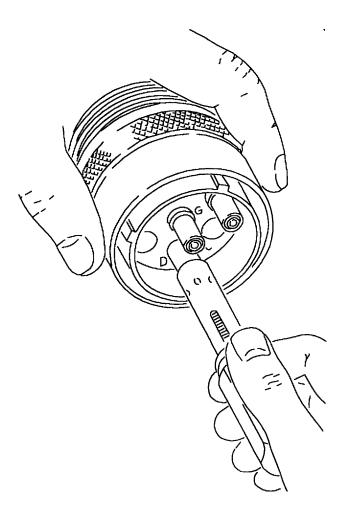
Damage may occur if contact removal tool is tilted or misaligned when in connector insert.

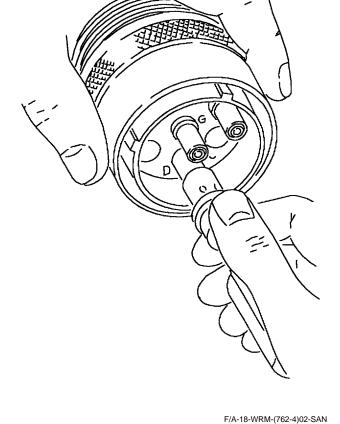
WARNING

Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.

- c. Isopropyl alcohol may be used as a lubricant for removal of contacts. Apply by brushing on connector insert grommet face or by dipping tool.
- d. Working from front (mating end) of connector, slide hollow end of removal tool over contact to be removed.

- e. Holding removal tool at a right angle to front insert face, push tool straight toward rear of connector, firmly pressing tool to positive stop when it bottoms in insert cavity. See figure 4.
- f. Maintain pressure on tool handle and slide collar of tool forward until it stops. Contact shall be partially ejected from rear of connector insert. See figure 5.



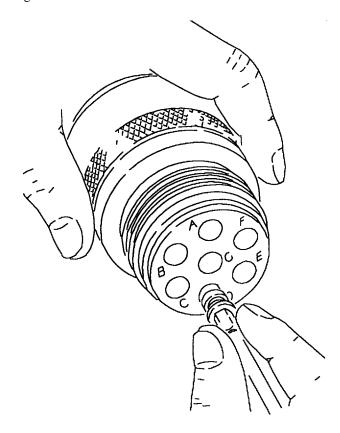


F/A-18-WRM-(762-3)02-SCAN

Figure 4. Unlocking Triaxial Contact Mechanism

Figure 5. Removing Triaxial Contact from Connector

- g. Remove tool from contact cavity by pulling straight back to clear connector insert face.
- h. Remove contact from rear of connector. See figure 6.



F/A-18-WRM-(762-5)02-SCAN

Figure 6. Extracting Wired Triaxial Contact from Connector

9. TRIAX REPAIR PROCEDURES.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- a. If backshell requires disassembly do the below substeps:
- (1) Determine correct connector data figure number from the Reference Designation to Figure Number Index within this work package.
- (2) To remove boot and backshell from connector, refer to backshell work package listed in Reference Work Package column of Reference Designation to Backshell Data Index.

10. TRIAXIAL CABLE STRIPPERS 45-163 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

11. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 7.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting two spare blades will change distance between blades 3/64-inch.

- c. Install screws and tighten finger tight.
- d. Adjust depth of cut.

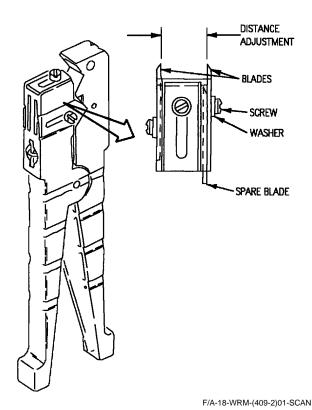


Figure 7. Distance Adjustment

12. CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 8.
- b. Adjust blade until it cuts through jacket without nicking shield and tighten screw.

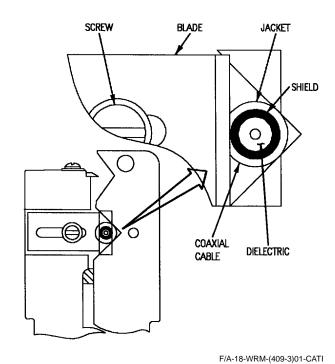


Figure 8. Jacket Cut Adjustment

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 9.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If required, repeat steps 12a through 12d until blades cut through jacket and shield without damaging shield and dielectric.

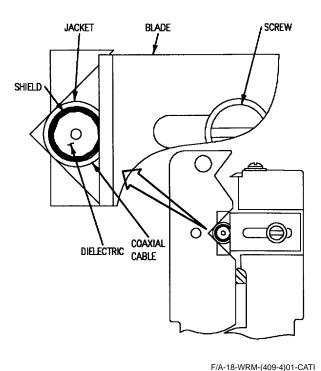


Figure 9. Shield Cut Adjustment

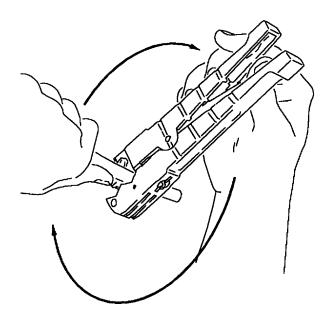
13. **USE.**

a. Position stripper on cable so that blades face. See figure 10.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off.

- b. Rotate stripper on cable by pressing handle blade side of stripper. Six to eight rotations will required to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.



F/A-18-WRM-(409-1)01-SCAN

Figure 10. Operation

14. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

15. DIE INSTALLATION.

- a. Align groove in die with key in crimping tool and push shank of die into hole.
- b. Close handle to make sure dies are seated and locked in place. See figure 11.

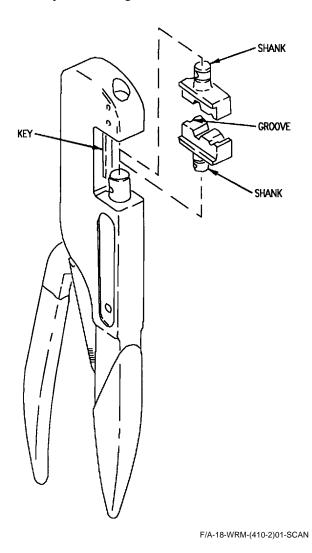


Figure 11. Die Installation

16. CRIMP PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

a. Slide outer ferrule over braided shield. Crimp outer ferrule. See figure 12.

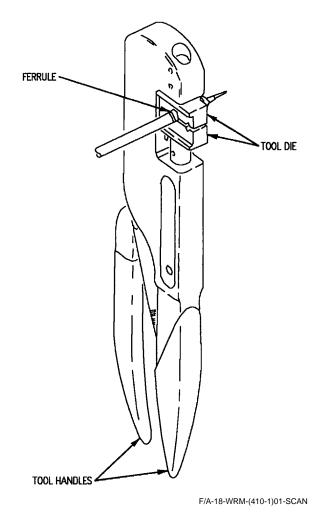


Figure 12. Crimping Operation

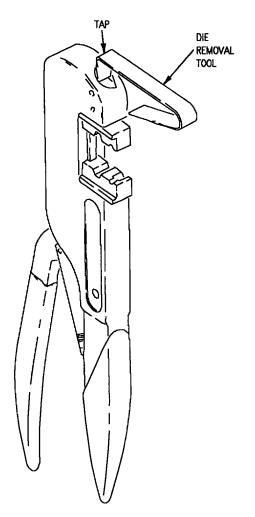
- b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove ferrule assembly and inspect crimp.

17. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 13.



F/A-18-WRM-(410-3)01-SCAN

Figure 13. Upper Die Removal

- b. The die will be released from the lock spring and ejected 1/15-inch. The die can now be removed by hand.
- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 14.
- d. Pull handle open with snap action. The die will be released from the lock spring and can then be removed by hand.

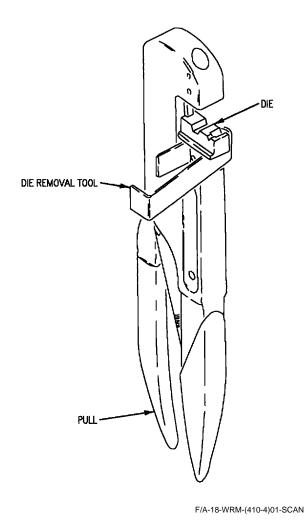
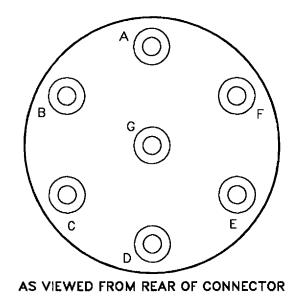


Figure 14. Lower Die Removal



F/A-18-WRM-(819-7A)01-CATI

Reference Designation to Backshell Data Index for L22TF96PN1 Connector

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE
80P-L018	None	None

Table 1. Tool Data

ITEM	TOOL NUMBER
Crimp Tool Handle	M22520/5-01
Die Set (Center Contact)	Y308S (Closure C)
Die Set (Inner Shield Ferrule)	Y308S (Closure B)
Die Set (Outer Shield Ferrule)	Y308S (Closure A)
Insertion Tool	DAK87-8
Removal Tool	DRK87-8
Removal Tool (Unwired)	DRK87-8

Table 2. Contact Data

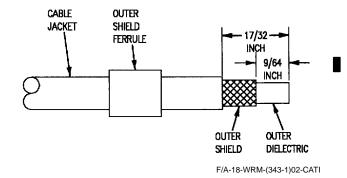
CONTACT	STRIP DIMENSION (+1/32 INCH)	CONTACT PART NO.	SEALING PLUG PART NO.
A THRU G	See Assembly Procedure for Triax Contact, figure 16	902-5020-2	MS27488-8

Figure 15. L22TF96PN1 Connector

CAUTION

When stripping cable, only amount of material necessary shall be removed. Do not cut too deep; braided shield or insulation may be damaged. Strip dimensions shall be as accurate as possible. Incorrect strip dimensions are the greatest cause of contact failure.

- a. Slide outer shield ferrule over cable.
- b. Strip jacket and outer shield using cable stripper 45-163.



c. Comb out outer shield and fold back over jacket.



To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

d. Strip outer dielectric, inner shield and inner dielectric, using cable strippers 45-163.

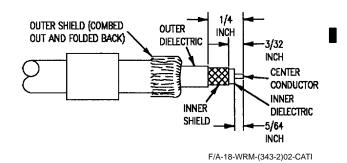
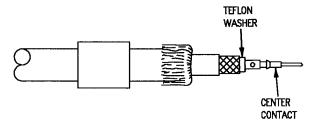


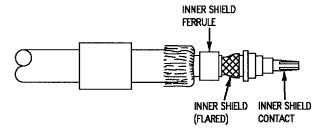
Figure 16. 902-5020-2 Triaxial Assembly Procedures (Sheet 1)

- e. Slide teflon washer over center conductor until it butts against the inner dielectric.
- f. Slide center contact over center conductor until it butts against the teflon washer. Center conductor must be visible through inspection hole of contact.
- g. Crimp center contact using M22520/5-01 Crimping Tool and Y308 Die Set, closure C.



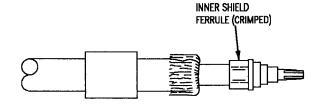
F/A-18-WRM-(343-3)02-CATI

- h. Slide inner shield contact over inner dielectric and under inner shield until it stops.
 - i. Flare inner shield.
- j. Trim inner shield at shoulder of inner shield contact.



F/A-18-WRM-(343-4)02-CATI

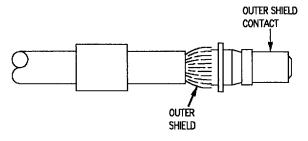
k. Slide inner shield ferrule over inner shield until it butts against shoulder of inner shield contact and crimp in place using M22520/5-01 Crimping Tool and Y308 Die Set, closure B.



F/A-18-WRM-(343-5)02-CATI

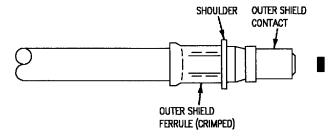
Page 15

1. Slide outer shield contact over inner shield contact until it stops and fold outer shield forward over outer shield contact and trim outer shield at shoulder.

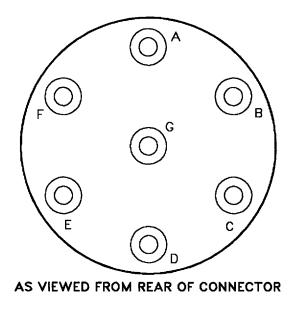


F/A-18-WRM-(343-6)02-CATI

m. Slide outer shield ferrule over outer shield until it butts against the shoulder of the outer shield contact and crimp in place using M22520/5-01 Crimping Tool and Y308 Die Set, closure A.



F/A-18-WRM-(343-7)02-CATI



F/A-18-WRM-(919-7A)01-CATI

Reference Designation to Backshell Data Index for L22TF96S8N1 Connector

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE
80J-L018	Backshell comes with connector	None

Table 1. Tool Data

ITEM	TOOL NUMBER
Crimp Tool Handle	M22520/5-01
Die Set (Center Contact)	Y308S (Closure C)
Die Set (Inner Shield Ferrule)	Y308S (Closure B)
Die Set (Outer Shield Ferrule)	Y308S (Closure A)
Insertion Tool	DAK87-8
Removal Tool	DRK87-8
Removal Tool (Unwired)	DRK87-8

Table 2. Contact Data

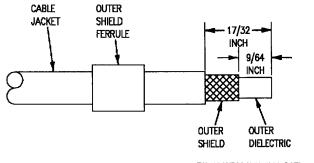
CONTACT	STRIP DIMENSION (+1/32 INCH)	CONTACT PART NO.	SEALING PLUG PART NO.
A THRU G	See Assembly Procedure for Triax Contact, figure 18	902-5019-2	MS27488-8

Figure 17. L22TF96S8N1 Connector

CAUTION

When stripping cable, only amount of material necessary shall be removed. Do not cut too deep; braided shield or insulation may be damaged. Strip dimensions shall be as accurate as possible. Incorrect strip dimensions are the greatest cause of contact failure.

- a. Slide outer shield ferrule over cable.
- b. Strip jacket and outer shield using cable stripper 45-163.



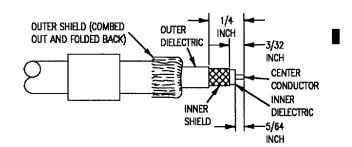
F/A-18-WRM-(343-1)02-CATI

c. Comb out outer shield and fold back over jacket.



To prevent premature failure of connector, do not nick center conductor while trimming dielectric.

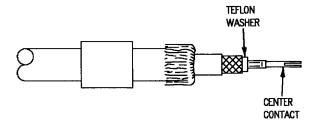
d. Strip outer dielectric, inner shield and inner dielectric, using cable strippers 45-163.



F/A-18-WRM-(343-2)02-CATI

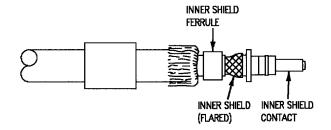
Figure 18. 902-5019-2 Triaxial Assembly Procedure (Sheet 1)

- e. Slide teflon washer over center conductor until it butts against the inner dielectric.
- f. Slide center contact over center conductor until it butts against the teflon washer. Center conductor must be visible through inspection hole of contact.
- g. Crimp center contact using M22520/5-01 Crimping Tool and Y308 Die Set, closure C.



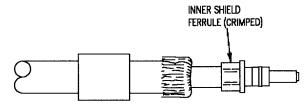
F/A-18-WRM-(1090-1)02-CATI

- h. Slide inner shield contact over inner dielectric and under inner shield until it stops.
 - i. Flare inner shield.
- j. Trim inner shield at shoulder of inner shield contact.



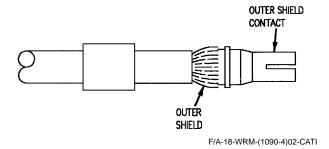
F/A-18-WRM-(1090-2)02-CATI

k. Slide inner shield ferrule over inner shield until it butts against shoulder of inner shield contact and crimp in place using M22520/5-01 Crimping Tool and Y308 Die Set, closure B.

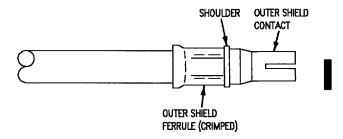


F/A-18-WRM-(1090-3)02-CATI

1. Slide outer shield contact over inner shield contact until it stops and fold outer shield forward over outer shield contact and trim outer shield at shoulder.



m. Slide outer shield ferrule over outer shield until it butts against the shoulder of the outer shield contact and crimp in place using M22520/5-01 Crimping Tool and Y308 Die Set, closure A.



F/A-18-WRM-(1090-5)02-CATI

1 October 1993

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

M22TR10XP6N-H2 (MIL-C-26482) COAX CONNECTOR REPAIR

Reference Material

Avionics Cleaning and Corrosion Prevention Control	NAVAIR 16-1-540
Electrical System	A1-F18AC-420-300
Utility Battery and Charger Unit or Utility Battery	WP019 00
Emergency Battery and Charger Unit or Emergency Battery	WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	A1-F18AC-WRM-000
Stripping Tools	WP010 00
Wire Type List	WP004 00

Alphabetical Index

Subject	Page No		
Adapter Tool Mating, Figure 5	6		
Cable Clamp Assembly, Figure 22	18		
Cable Clamp Disassembly, Figure 3	4		
Cable Clamp Disassembly Procedure	3		
Cable Clamp Reassembly Procedure	18		
Cable Clamp Removal, Figure 2	4		
CM Adapter Tools, Figure 4	5		
Coax Repair Procedures	13		
Coaxial Cable Strippers 45-163 Adjustment and Use	14		
Cut Adjustment	14		
Distance Adjustment	14		
Use	15		
Corrosion Control	3		
Crimp Positioning, Figure 19	16		
Crimp Tool M22520/5-01 Assembly and Use	16		
Crimp Procedure	16		
Die Installation	16		
Die Removal	17		
Description	2		
Die Installation, Figure 18	16		
Distance Adjustment, Figure 14	14		
Extracting Wired Coax Contact From Connector, Figure 13	13		
Inserting Coax Contacts Into Connector, Figure 9	10		
Inserting Sealing Plugs(s) Into Connector, Figure 10			
Insertion of Coax Contact Into Connector			
Installation of Cable Clamp, Figure 24	19		

Alphabetical Index (Continued)

Subject	Page No
Installing Saddle Clamp, Figure 25	20
Jacket Cut Adjustment, Figure 15	14
Loosening Position of Wrench, Figure 8	9
Lower Die Removal, Figure 21	17
Materials Required	3
M22TR10XP6N-H2 Connector, Figure 26	21
Operation, Figure 17	15
Reference Designation to Figure Number Index	2
Reinforced Silicone Rubber Tape Buildup, Figure 23	18
Reinforced Silicone Rubber Tape, Table 1	19
Removing Coax Contact From Connector, Figure 12	12
Removing Reinforced Silicone Rubber Tape Buildup, Figure 1	3
Shield Cut Adjustment, Figure 16	15
Strap Wrench Setup and Adjustment, Figure 6	7
Support Equipment Required	3
Tightening Position of Wrench, Figure 7	8
Tool Application Procedure	5
CM Adapter Tools	5
Strap Wrench	7
Unlocking Coax Contact Mechanism, Figure 11	12
Upper Die Removal, Figure 20	17
Wire Preparation	5
Wired Coax Contact Removal From Connector	11
700-168D28 and 700-170D28 Coax Contact Assembly Procedure, Figure 27	22

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

1. **DESCRIPTION.**

Reference
Designation Figure No.

2. The M22TR10XP6N-H2 is a straight electrical connector, with multi-pin coax contacts.

78P-E001B 26

3. Each connector part number is supported by an illustration which represents the contact arrangement, a reference designation list and tables containing tooling and parts data.



Unwired connector cavities shall have a sealing plug installed to prevent water intrusion.

Support Equipment Required

Type Designation	Nomenclature
CM264-22 3308AS100	CM Adapter Tool Repair Set-Wire and
3300AB100	Connector

Part Number or

Materials Required

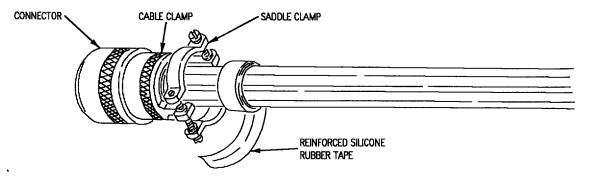
Specification or Part Number	Nomenclature
See Table 1	Reinforced Silicone Rubber Tape
H-B-643,TYPE 2, CLASS 1, SIZE 1	Brush, Acid Swab
TT-I-735 GRADE B	Isopropyl Alcohol

4. CORROSION CONTROL.

a. For cleaning and anticorrosion methods, refer to NAVAIR 16-1-540.

5. CABLE CLAMP DISASSEMBLY PROCEDURE.

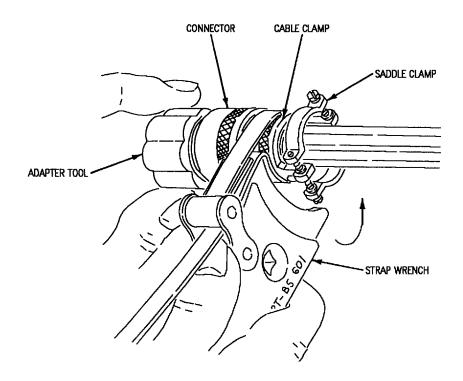
- a. Loosen saddle clamp.
- b. Remove reinforced silicone rubber tape buildup and discard. See figure 1.



F/A-18-WRM-(885-1)02-SCAN

Figure 1. Removing Reinforced Silicone Rubber Tape Buildup

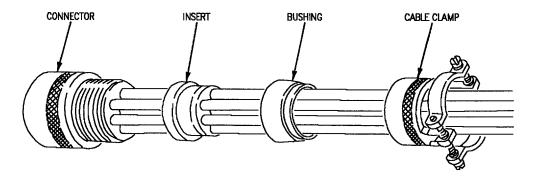
- c. Position strap wrench and adapter tool on connector.
- d. Loosen and remove cable clamp from connector. See figure 2.



F/A-18-WRM-(885-2)02-SCAN

Figure 2. Cable Clamp Removal

e. Slide cable clamp, bushing and insert back over cable assembly. See figure 3.



F/A-18-WRM-(885-3)02-SCAN

Figure 3. Cable Clamp Disassembly

6. WIRE PREPARATION.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- a. Cut wire to required length.
- b. Determine correct strip dimension in table 2 contact data in the correct connector data figure number. The connector figure number is listed in the Reference Designation to Figure Number Index within this work package.

BASIC PART NUMBER -

NOTE

Determine the wire types of the wire, using the applicable Cable/Wiring Assembly Data Work Package in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070.



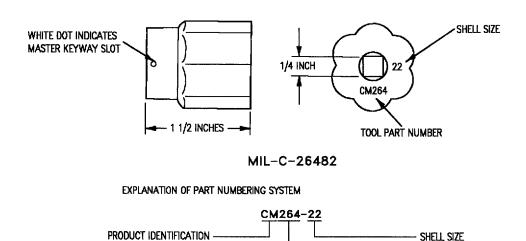
For a detailed explanation of wire strippers see WP010 00.

c. Select the correct wire strippers for the wire by referring to the Wire Type List WP004 00 for the particular wire type used.

7. TOOL APPLICATION PROCEDURE.

8. CM ADAPTER TOOLS.

a. Use adapter tool shown in figure 4.



F/A18-WRM-(888-1)02-CATI

Figure 4. CM Adapter Tool

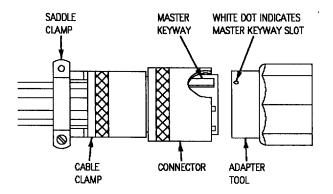


White dot on adapter tool must be in line with master key of connector before insertion. Spinning the adapter tool onto connector until it slips into place causes unnecessary wear to tools, keys and keyways.

NOTE

T-Handle can be used for additional gripping force to adapter if required.

b. Mate adapter tool to connector. See figure 5.



F/A-18-WRM-(889-1)02-CATI

Figure 5. Adapter Tool Mating

9. STRAP WRENCH.

a. Install strap wrench around cable clamp. Draw strap tight and through the locking link so cable clamp and strap rest on nose of wrench. See figure 6.

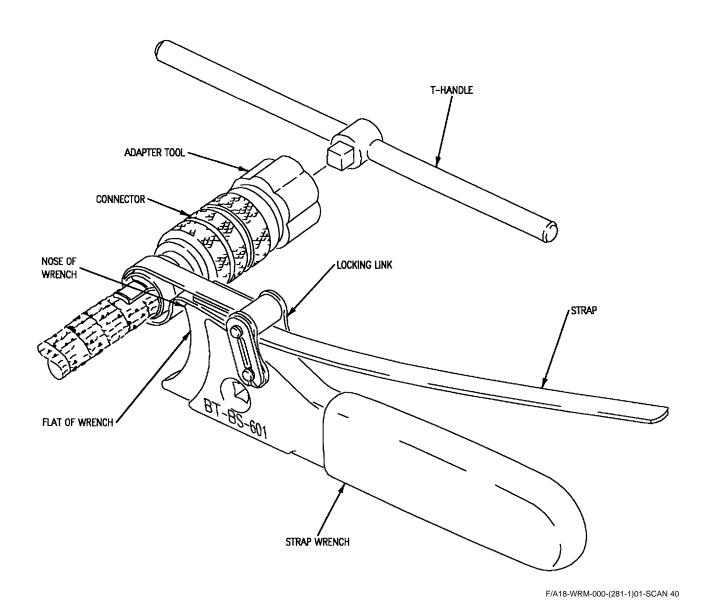
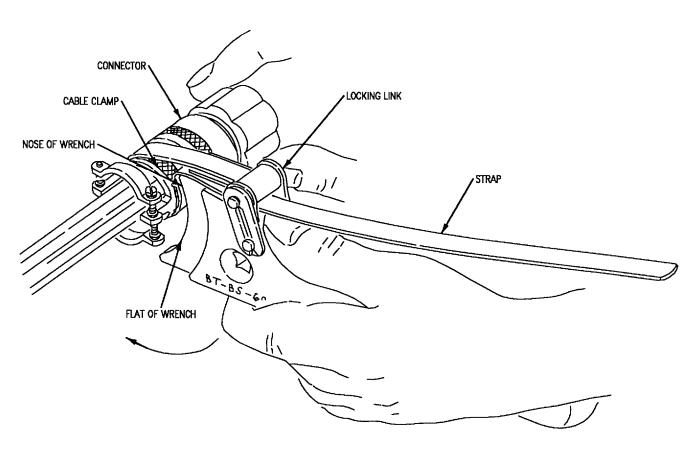


Figure 6. Strap Wrench Setup and Adjustment

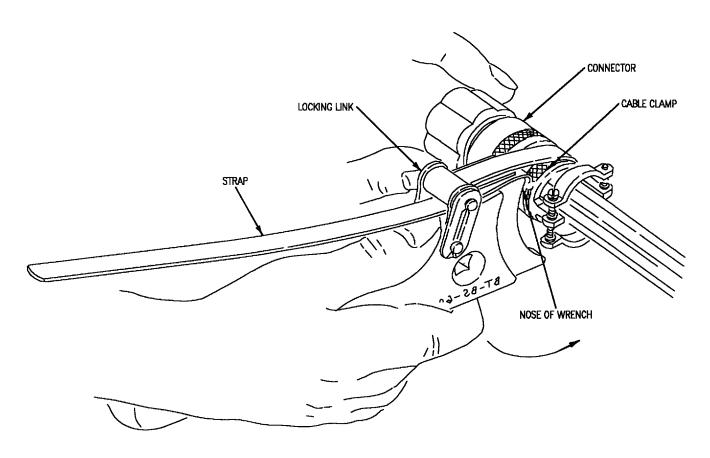
b. Tightening cable clamp is accomplished with the setup shown in figure 7. Apply force in a clockwise direction as viewed from the rear of the connector. The cable clamp and strap are tucked beneath the nose of the wrench and against the flat.



F/A-18-WRM-(885-4)02-SCAN

Figure 7. Tightening Position of Wrench

c. Loosening is accomplished with the setup shown in figure 8. Apply force in a counterclockwise direction as viewed from the rear of the connector. The cable clamp and strap are tucked beneath the nose of the wrench and against the flat.



F/A-18-WRM-(885-5)02-SCAN

Figure 8. Loosening Position of Wrench

10. INSERTION OF COAX CONTACT INTO CONNECTOR.

CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

a. If cable clamp requires disassembly, go to paragraph 5 this work package.

WARNING

Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.

b. Isopropyl alcohol may be used as a lubricant for insertion of contacts. Apply by brushing on connector insert grommet face or by dipping.

NOTE

Insertion of coax contacts is to be done by hand.

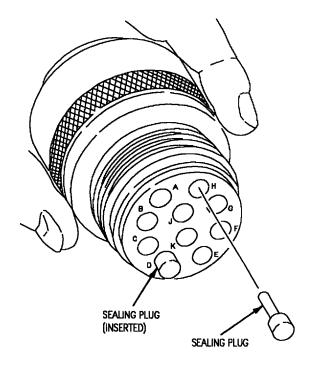
c. At right angle to connector insert, align contact with cavity in connector and press contact firmly to seat contact in cavity. Slight click may be heard as retention tines snap into place behind contact shoulder. See figure 9.



F/A-18-WRM-(774-1)02-SCAN

Figure 9. Inserting Coax Contacts into Connector

d. Fill all unused contact cavities with sealing plug, small diameter first, until it bottoms against contact cavity. See figure 10.



F/A-18-WRM-(774-2)02-SCAN

Figure 10. Inserting Sealing Plug(s) into Connector

11. WIRED COAX CONTACT REMOVAL FROM CONNECTOR.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

a. If cable clamp requires disassembly, do paragraph 5 this WP.

b. Select removal tool specified in table 1 Tool Data in the correct connector data figure number. The connector data figure number is found by locating the reference designation in the Reference Designation to Figure Number Index within this work package.

WARNING

Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.



Damage may occur if contact removal tool is tilted or misaligned when in connector insert.

- c. Isopropyl alcohol may be used as a lubricant for removal of contacts. Apply by brushing on connector insert grommet face or by dipping tool.
- d. Working from front (mating end) of connector, slide hollow end of removal tool over contact to be removed.

- e. Holding removal tool at a right angle to front insert face, push tool straight toward rear of connector, firmly pressing tool to positive stop when it bottoms in insert cavity. See figure 11.
- f. Maintain pressure on tool handle and slide collar of tool forward until it stops. Contact shall be partially ejected from rear of connector insert. See figure 12.



F/A-18-WRM-(774-3)02-SCAN

Figure 11. Unlocking Coax Contact Mechanism

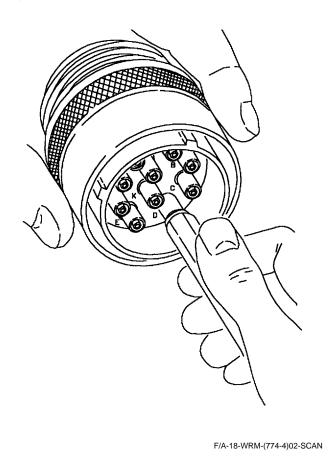
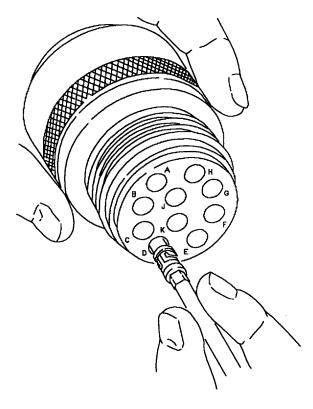


Figure 12. Removing Coax Contact from Connector

- g. Remove tool from contact cavity by pulling straight back to clear connector insert face.
- h. Remove contact from rear of connector. See figure 13.



F/A-18-WRM-(774-5)02-SCAN

Figure 13. Extracting Wired Coax Contact from Connector

12. COAX REPAIR PROCEDURES.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

a. If backshell requires disassembly, go to paragraph 5, this work package.

13. COAXIAL CABLE STRIPPERS 45-163 ADJUSTMENT AND USE.

NOTE

For detailed operation of coaxial wire strippers see WP010 00.

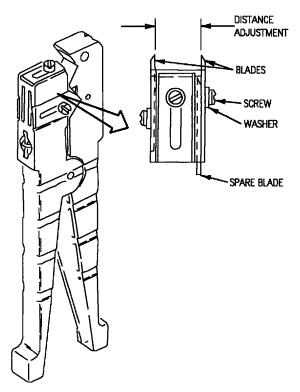
14. DISTANCE ADJUSTMENT.

- a. Measure distance between blades. See figure 14.
- b. Remove screws and add or subtract spare blades as required to get correct distance.

NOTE

Adding or subtracting two spare blades will change distance between blades 3/64-inch.

- c. Install screws and tighten finger tight.
- d. Adjust depth of cut.



F/A-18-WRM-(409-2)01-SCAN

Figure 14. Distance Adjustment

15. CUT ADJUSTMENT.

NOTE

A test strip should be done on spare coax before stripping coax to be used.

- a. Position coaxial cable in stripper until the end butts against the blade. See figure 15.
- b. Adjust blade until it cuts through jacket without nicking shield and tighten screw.

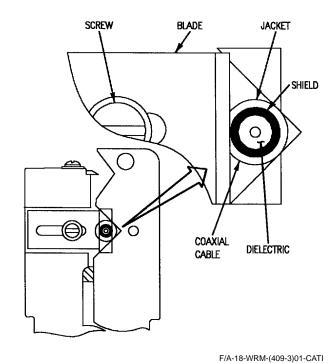
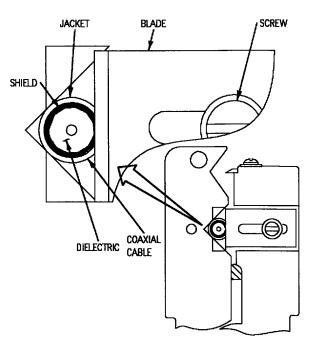


Figure 15. Jacket Cut Adjustment

- c. Remove coaxial cable and insert into other side of stripper until the end butts against the remaining blade. See figure 16.
- d. Adjust blade so it cuts through shield without damaging dielectric.
- e. If required, repeat steps 15a through 15d until blades cut through jacket and shield without damaging shield and dielectric.



F/A-18-WRM-(409-4)01-CATI

Figure 16. Shield Cut Adjustment

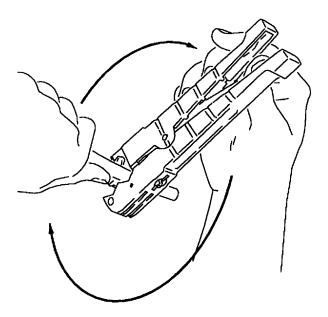
16. **USE.**

a. Position stripper on cable so that blades face down. See figure 17.

NOTE

Rotating stripper in wrong direction may cause stripper to jump off cable.

- b. Rotate stripper on cable by pressing handle on blade side of stripper. Six to eight rotations will be required to finish cut.
 - c. Remove stripper from cable.
 - d. Remove stripped jacket and shield.



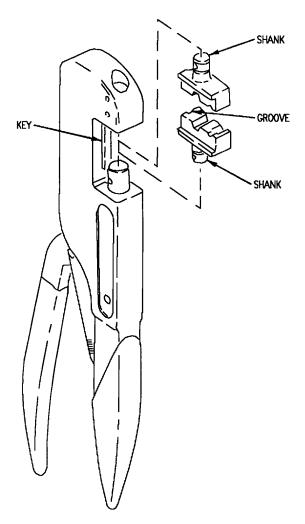
F/A-18-WRM-(409-1)01-SCAN

Figure 17. Operation

17. CRIMP TOOL M22520/5-01 ASSEMBLY AND USE.

18. DIE INSTALLATION.

a. Align groove in die with key in crimping tool and push shank of die into hole. See figure 18.



F/A-18-WRM-(410-2)01-SCAN

Figure 18. Die Installation

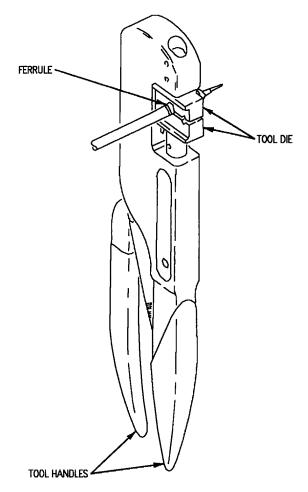
b. Close handle to make sure dies are seated and locked in place.

19. CRIMP PROCEDURE.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

a. Slide outer ferrule over braided shield. Crimp figure 19.



F/A-18-WRM-(410-1)01-SCAN

Figure 19. Crimp Positioning

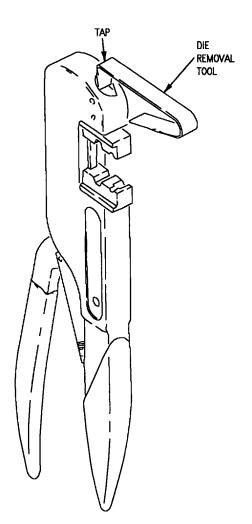
- b. Squeeze tool handles until ratchet releases.
- c. Open handles and remove ferrule assembly and inspect crimp.

20. DIE REMOVAL.

NOTE

Die removal tool is furnished with crimping tool. If removal tool is not available, a rod 3/16-inches in diameter may be used.

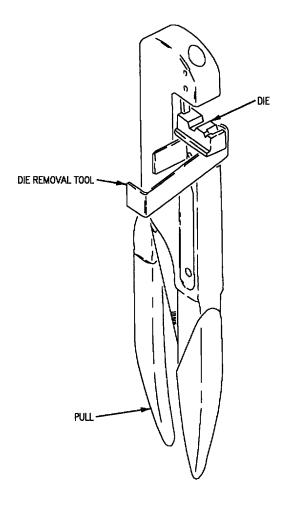
a. With crimping tool handle open, place die removal tool against end of knock-out pad and tap gently. See figure 20.



F/A-18-WRM-(410-3)01-SCAN

Figure 20. Upper Die Removal

- b. The die will be released from the lock spring and ejected 1/16-inch. The die can now be removed by hand.
- c. Close the crimping tool handle and slide the die removal tool between the die and tool body. See figure 21.



F/A-18-WRM-(410-4)01-SCAN

Figure 21. Lower Die Removal

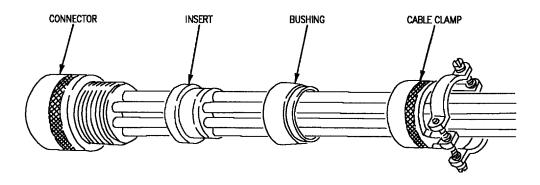
d. Pull handle open with snap action. The die will be released from the lock spring and can then be removed by hand.

21. CABLE CLAMP REASSEMBLY PROCEDURE.

WARNING

Isopropyl alcohol is highly flammable and toxic. Do not use near open flame or sparks. Use only in well ventilated areas.

- a. Isopropyl alcohol may be used as a lubricant. Apply by brushing on insert.
 - b. Slide insert and bushing into connector.
- c. Slide cable clamp onto connector and screw into place (hand tighten). See figure 22.

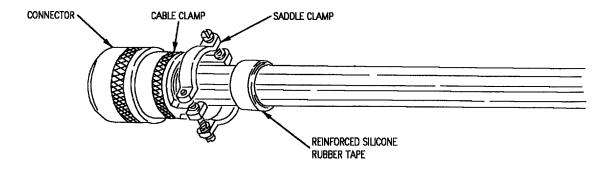


F/A-18-WRM-(885-3)02-SCAN

Figure 22. Cable Clamp Assembly

d. Build up cable assembly diameter under saddle clamp with reinforced silicone rubber tape (table 1) to

provide good clamping between saddle clamp and cable assembly. See figure 23.



F/A-18-WRM-(885-6)02-SCAN

Figure 23. Reinforced Silicone Rubber Tape Buildup

Table 1. Reinforced Silicone Rubber Tape

PART NUMBER	CAGE	WIDTH (INCH)
S-25	07099	1/2
S-80	07099	1/2

REINFORCED WITH FIBERGLASS

SELF - BONDING

TAPE COMES IN ROLLS

COLOR - BLACK

TEMPERATURE RANGE: -178° TO +500°F



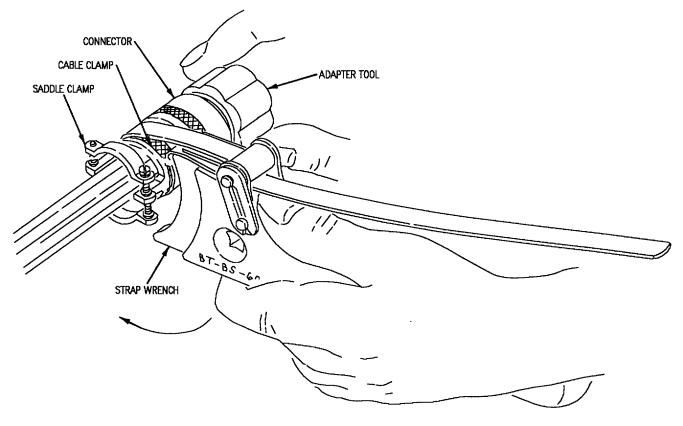
f. Tighten cable clamp on connector by turning clockwise a quarter turn. See figure 24.

NOTE

Leave 2 threads exposed, allowing 1/16-inch gap between saddle clamp when fully tightened.

Make sure cable clamp does not touch wires.

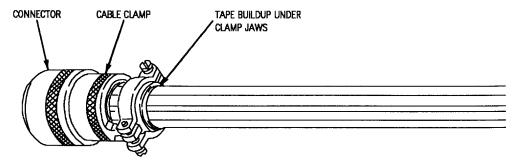
e. Position strap wrench and adapter tool on connector.



F/A-18-WRM-(885-7)02-SCAN

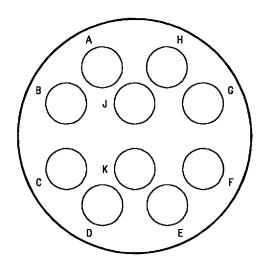
Figure 24. Installation of Cable Clamp

g. Tighten saddle clamp. See figure 25.



F/A-18-WRM-(885-8)02-SCAN

Figure 25. Installing Saddle Clamp



AS VIEWED FROM REAR OF CONNECTOR

F/A-18-WRM-(783-1)02-CATI

Reference Designation to Backshell Data Index for M22TR10XP6N-H2 Connector

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE
78P-E001B	B22SR	Para 5 and 21 this WP

Figure 1. Tool Data

ITEM	TOOL NUMBER
Crimp Tool Handle	M8ND
Die Set(Center Contact)	N22RVMT-10 (Cavity 22)
Die Set(Outer Ferrule)	N22RVMT-10 (Cavity 110)
Insertion Tool	N/A
Removal Tool	RX8-1

Table 2. Contact Data

CONTACT	STRIP DIMENSION	CONTACT	SEALING PLUG
	(+1/32 INCH)	PART NO.	PART NO.
E and H B, C, F and G A, D, J and K (BLANK)	See figure 27	700-168D28 700-170D28	MS27488-12

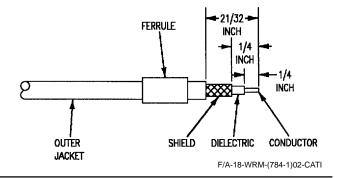
Figure 26. M22TR10XP6N-H2 Connector

CAUTION

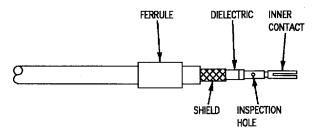
To prevent damage to aircraft wiring or equipment disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24VDC battery voltage consists in some wiring.

When stripping cable, only amount of material necessary shall be removed. Do not cut too deep; braided shield or insulation may be damaged. Strip dimensions shall be as accurate as possible. Incorrect strip dimensions are the greatest cause of contact failure.

a. Slide ferrule over outer jacket. Using coax cable strippers remove outer jacket and braided shield as shown, Using sharp knife trim dielectric as shown.

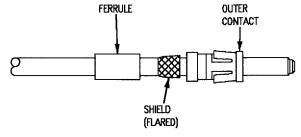


b. Slide inner contact over conductor until it butts against dielectric. Conductor must be visible through inspection hole of inner contact. Using M22520/5-01 Crimping tool and Y460S Closure B, crimp inner contact



F/A-18-WRM-(784-2)02-CATI

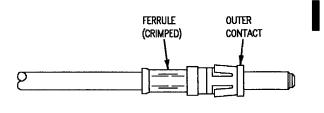
- c. Flare shield
- d. Slide outer contact over inner contact from coaxial cable. Slide inner contact against shoulder of outer contact as shown.



F/A-18-WRM-(784-3)02-CATI

Figure 27. 700-168D28 and 700-170D28 Coax Contact Assembly Procedure (Sheet 1)

- e. Slide ferrule over shield until it butts against shoulder of outer contact.
- f. Crimp ferrule over shield using M22520/5-01 crimping tool and Y460S closure B.



F/A-18-WRM-(784-4)02-CATI

ORGANIZATIONAL AND INTERMEDIATE MAINTENANCE

WIRING REPAIR WITH PARTS DATA

M83723-76A2232N (MIL-C-83723 SERIES 3)

CONNECTOR REPAIR

Reference Material

Avionics Cleaning and Corrosion Prevention Control	IR 16-1-540
Electrical System A1-F18	AC-420-300
Utility Battery and Charger Unit or Utility Battery	. WP019 00
Emergency Battery and Charger Unit or Emergency Battery	. WP020 00
Wiring Repair With Parts Data, General Wiring Repair Procedures	C-WRM-000
Protective Boot Installation for Environmental Type Connectors With Metal Clamps	WP080 00
Stripping Tools	. WP010 00
Wire Type List	. WP004 00

Alphabetical Index

Subject	Page No.
Broken Wire Contact Removal, Figure 20	18
Broken Wire Contact Removal From Connector	17
Contact Crimping	9
Contact Crimping, Figure 9	10
Corrosion Control	3
Crimp Tool Handle M22520/1-01 Assembly and Adjustments	6
Adjusting Turret Head Before Crimping	8
Removal and Installation of Turret Head	7
Setting Selector Knob Using Turret Head	8
Crimp Tool Handle M22520/2-01 Assembly and Adjustments	8
Removal and Installation of Positioner	9
Setting Selector Knob	9
Description	2
Extracting Contact From Connector, Figure 18	16
Inserting Contact Into Insertion Tool, Figure 11	12
Inserting Contacts Into Connector, Figure 12	12
Inserting Sealing Plugs(s) Into Connector, Figure 13	13
Insertion of Contact Into Connector	11
Inspection of Crimped Contact, Figure 10	11
Materials Required	3

Alphabetical Index (Continued)

Subject	Page No
Military Part Numbering System for MIL-C-83723, Series 3, Connectors, Figure 1	3
M22520/1-01 Crimp Tool Handle and Turret Head, Figure 6	7
M22520/2-01 Crimp Tool Handle and Positioner, Figure 7	9
M83723-76A2232N Connector, Figure 21	19
Placing Wire in Slot of Stripping Tool, Figure 2	4
Reference Designation to Figure Number Index	2
Removal Tool on Wire, Figure 14	14
Removing Contact From Connector, Figure 16	15
Removing Insulation, Figure 3	5
Repair Procedure	3
Strip Gap Check, Figure 8	10
Stripping Completed, Figure 4	5
Support Equipment Required	3
Unacceptable Conditions, Figure 5	6
Unlocking Contact Mechanism, Figure 15	14
Unlocking Contact Retention Mechanism of Broken Wire Contact, Figure 19	18
Unlocking Contact Retention Mechanism with Unwired Contact Removal Tool Figure 17	16
Unwired Contact Removal From Connector	15
Wire Preparation	4
Wired Contact Removal From Connector	13

Record of Applicable Technical Directives

None

Reference Designation to Figure Number Index

Reference Designation Figure No. 1 64P-E001Q 21 2 64P-E001Q 35 (WP182 00)

LEGEND

1	→ 161353 THRU 161528
2	161702 AND UP

1. **DESCRIPTION.**

- 2. The MIL-C-83723, Series 3, electrical connectors are bayonet coupling, circular environmental resistant type connectors. They have removable rear release type contacts and are capable of operation within temperature limits of -85° F to +200° F.
- 3. Each connector part number is supported by an illustration which represents the contact arrangement, a reference designation list and tables containing tooling and parts data.



Unwired connector cavities shall have a sealing plug installed to prevent water intrusion.

NOTE

The unwired coax contact cavities in connector 64P-E001Q shall all have a sealing plug installed.

4. See figure 1 for a breakdown of the military part numbering system for MIL-C-83723, Series 3, connectors used on F/A-18 aircraft.

Support Equipment Required

Part Number or Type Designation

Nomenclature

3308AS100

Repair Set-Wire and Connector

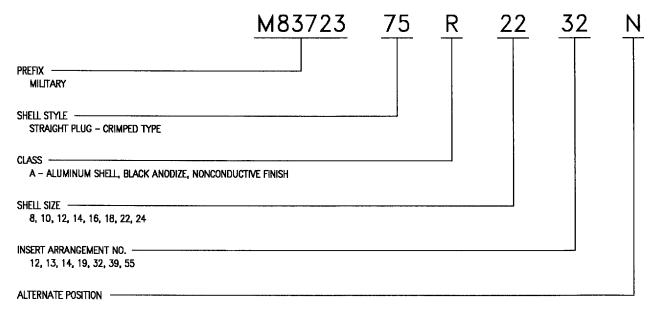
Materials Required

Specification or Part Number

Nomenclature

TT-I-735 GRADE B

Alcohol, Isopropyl



F/A-18-WRM-(200-6)02-CATI

Figure 1. Military Part Numbering System for MIL-C-83723, Series 3, Connectors

5. CORROSION CONTROL.

a. For cleaning and anticorrosion methods, refer to NAVAIR 16-1-540.

6. REPAIR PROCEDURE.

a. If backshell requires disassembly, do the substeps below:

- (1) Determine correct connector data figure number from the Reference Designation to Figure Number Index within this work package.
- (2) To remove boot and backshell from connector, refer to backshell work package listed in Reference Work Package column of Reference Designation to Backshell Data Index.

7. WIRE PREPARATION.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- a. Cut wire to required length.
- b. Determine correct strip dimension in table 2 contact data in the correct connector data figure number. The connector figure number is listed in the Reference Designation to Figure Number Index within this work package.

NOTE

Determine the wire types of the wire, using the applicable Cable/Wiring Assembly Data Work Package in volumes A1-F18AC-WRM-010 through A1-F18AC-WRM-070.

For a detailed explanation of wire strippers see WP010 00.

c. Select the correct wire strippers for the wire by referring to the Wire Type List WP004 00 for the particular wire type used.

d. Insert wire into exact center of correct cutting slot for wire size to be stripped (each slot is marked with wire size). See figure 2.

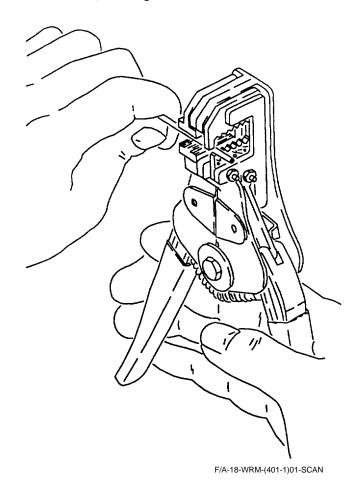
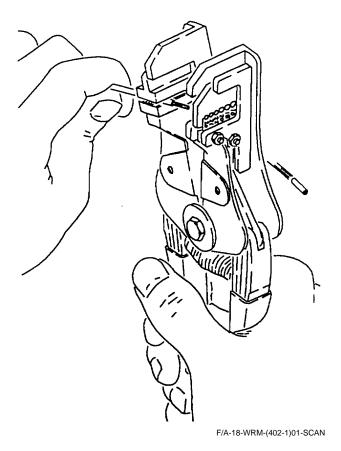


Figure 2. Placing Wire in Slot of Stripping Tool

e. Close handles together as far as they will go. See figure 3.



f. Remove wire while releasing handles, allowing wire holder to return to open position. See figure 4

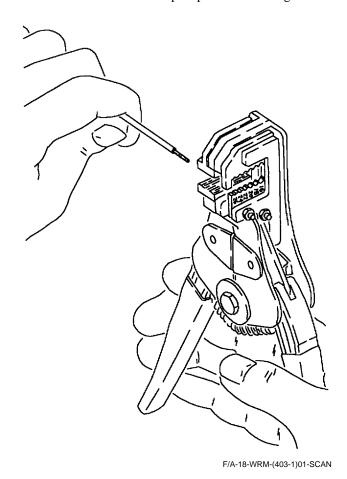


Figure 3. Removing Insulation

Figure 4. Stripping Completed

g. After stripping, twist strands of wire firmly together in the same direction as the normal lay of the wire.

h. Conditions shown in figure 5 are unacceptable.

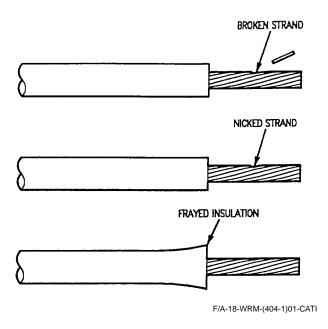


Figure 5. Unacceptable Conditions

8. CRIMP TOOL HANDLE M22520/1-01 ASSEMBLY AND ADJUSTMENTS.

NOTE

Make sure crimp tool is operating correctly by using M22520/3-1 inspection gage.

a. Select crimp tool handle and positioner specified in table 1 Tool Data in the correct connector data figure number. The connector data figure number is found by locating the reference designation in the Reference Designation to Figure Number Index within this work package.

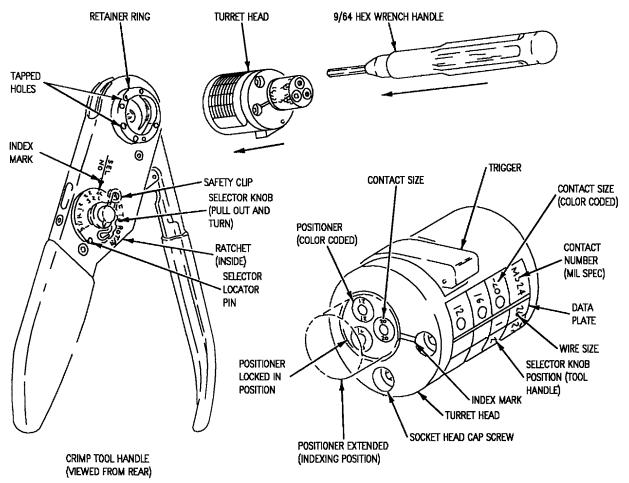
9. REMOVAL AND INSTALLATION OF TURRET HEAD.

NOTE

Crimp tool handle shall be fully open when inserting turret of positioner head and when changing selector positions.

a. Press trigger of turret head releasing positioner to extended (indexing) position. See figure 6.

- b. Seat turret head onto retaining ring on back of tool with socket head cap screws lined up with tapped holes.
- c. Tighten socket head screws with a 9/64-inch hex wrench.
- d. To remove turret head, loosen socket head screw until threads are disengaged from tapped holes and lift off crimp tool.



F/A-18-WRM-(405-1)01-SCAN

Figure 6. M22520/1-01 Crimp Tool Handle and Turret Head

10. ADJUSTING TURRET HEAD BEFORE CRIMPING.

- a. Press trigger on turret head releasing positioner to extended (indexing) position.
- b. Select position desired from color coded data plate on side of turret head assembly.
- c. Rotate positioners until color coded positioner is lined up with index mark.
- d. Press positioner into turret head until it snaps into locked position.

11. SETTING SELECTOR KNOB USING TURRET HEAD.

a. Refer to data plate on turret head assembly. The correct selector number is listed below the wire size and opposite the contact size.

- b. Remove the safety clip lock from selector knob.
- c. Raise selector knob and rotate to selector number found on data plate.
 - d. Replace safety clip.

12. CRIMP TOOL HANDLE M22520/2-01 ASSEMBLY AND ADJUSTMENTS.

NOTE

Make sure crimp tool is operating correctly by using M22520/3-1 inspection gage.

a. Select crimp tool handle and positioner specified in table 1 Tool Data in the correct connector data figure number. The connector data figure number is found by locating the reference designation in the Reference Designation to Figure Number Index within this work package.

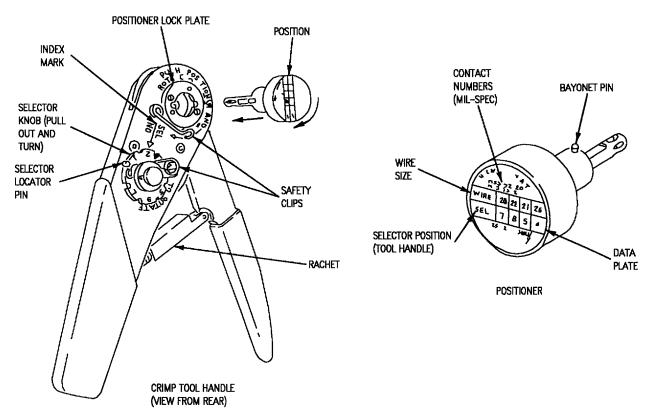
13. REMOVAL AND INSTALLATION OF POSITIONER.

NOTE

Tool handle shall be fully open when inserting turret of positioner head and when changing selector positions.

a. Align bayonet pins on positioner with keyway on positioner lock plate. See figure 7.

- b. Push positioner into lock plate until it bottoms, maintain pressure and turn clockwise until it stops. Insert safety clip.
- c. To remove, pull safety clip out. Turn positioner counter clockwise until it stops and lift straight up out of lock plate.



F/A-18-WRM-(405-2)01-SCAN

Figure 7. M22520/2-01 Crimp Tool Handle and Positioner

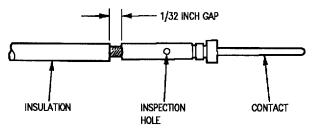
14. SETTING SELECTOR KNOB.

- a. Locate wire size on data plate of positioner and note corresponding selector number.
- b. Remove safety clip. Lift selector knob and rotate until selector number found on data plate aligns with index.
 - c. Install safety clip.

15. CONTACT CRIMPING.

- a. Select correct contact specified in table 2 for affected connector part number.
- b. Insert stripped wire into contact and make sure wire strands are visible in contact inspection hole.

c. Visually inspect gap dimension between contact and insulation as shown in figure 8.



F/A-18-WRM-(416-1)01-SCAN

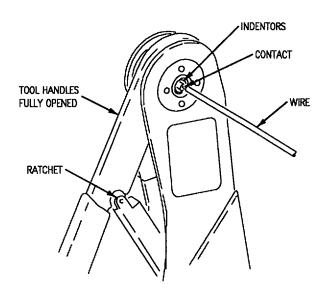
Figure 8. Strip Gap Check

d. Insert contact and wire into crimp tool indentors on front of tool until contact bottoms in positioner/turret. See figure 9, detail A.

NOTE

Crimp tool will not release until crimping cycle is completed.

e. Hold wire in place and squeeze tool handles together smoothly until ratchet releases and tool opens. See figure 9, detail B.



CRIMP TOOL HANDLE (VIEWED FROM FRONT)

DETAIL A

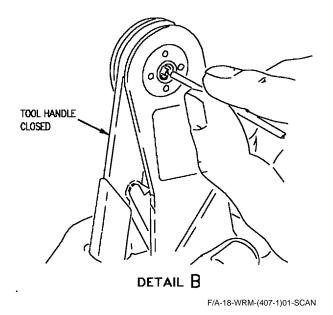
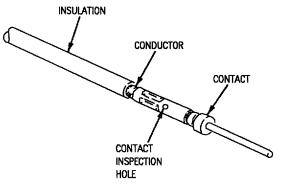


Figure 9. Contact Crimping

- f. Remove crimped contact from tool and inspect wire strands in contact inspection hole figure 10.
- (1) Two series of four indents shall grip wire and secure contact to wire.
- (2) Wire shall be visible in contact inspection hole, indicating that wire is crimped into contact at correct depth.
 - (3) There shall be no loose or nicked strands.



F/A-18-WRM-(W168-1)01-CATI

Figure 10. Inspection of Crimped Contact

16. INSERTION OF CONTACT INTO CONNECTOR.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, 24vdc battery voltage exists in some wiring.

- a. If backshell requires disassembly, do the substeps below:
- (1) Determine correct connector data figure number from the Reference Designation to Figure Number Index within this work package.

- (2) To remove boot and backshell from connector, refer to backshell work package listed in Reference Work Package column of Reference Designation to Backshell Data Index.
- b. Select insertion tool specified in table 1 Tool Data in the correct connector data figure number. The connector data figure number is found by locating the reference designation in the Reference Designation to Figure Number Index within this work package.

WARNING

Isopropyl alcohol is highly flammable. Do not use near open flame or sparks. Use only in well ventilated areas.

c. Isopropyl alcohol may be used as a lubricant for removal of contacts. Apply by brushing on connector insert grommet face or by dipping tool. d. Place wire and contact assembly into insertion tool and position tool tip over crimp barrel to butt contact shoulder. See figure 11.

CAUTION

Damage may occur to contact removal tool if tilted or rotated when in connector insert.

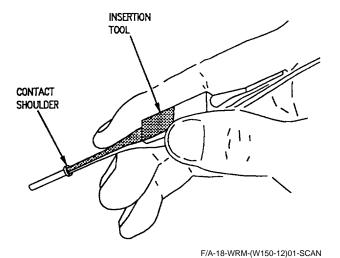


Figure 11. Inserting Contact into Insertion Tool

e. At right angle to connector insert, align contact with cavity in connector and press contact firmly with insertion tool to seat contact in cavity. Slight click may be heard as retention tines snap into place behind contact shoulder. See figure 12.

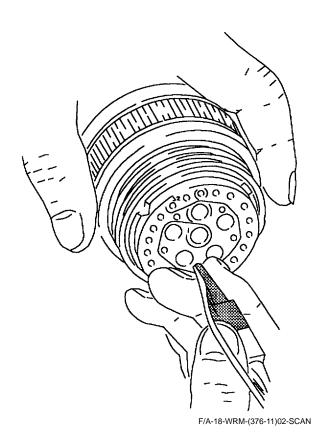


Figure 12. Inserting Contacts into Connector

f. Remove insertion tool by pulling it straight out of contact cavity and disengage from wire. Carefully pull back on wire to make sure contact is correctly seated. g. Fill all unused contact cavities with uncrimped contacts, then insert sealing plug, small diameter first, until it bottoms against contact cavity. See figure 13.

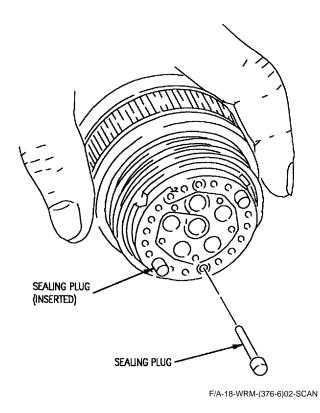


Figure 13. Inserting Sealing Plug(s) into Connector

17. WIRED CONTACT REMOVAL FROM CONNECTOR.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, vac battery voltage exists in some wiring.

- a. If backshell requires disassembly, do the substeps below:
- (1) Determine correct connector data figure number from the Reference Designation to Figure Number Index within this work package.

- (2) To remove boot and backshell from connector, refer to backshell work package listed in Reference Work Package column of Reference Designation to Backshell Data Index.
- b. Select removal tool specified in table 1 Tool Data in the correct connector data figure number. The connector data figure number is found by locating the reference designation in the Reference Designation to Figure Number Index within this work package.



Damage may occur if contact removal tool is tilted or misaligned when in connector insert.

WARNING

Isopropyl alcohol is highly flammable. Do not use near open flame or sparks. Use only in well ventilated areas.

- c. Isopropyl alcohol may be used as a lubricant for removal of contacts. Apply by brushing on connector insert grommet face or by dipping tool.
- d. Place wire of contact to be removed into removal tool, with tool tip facing connector insert.

- e. Slide removal tool along wire at right angle to connector insert and align with contact cavity. See figure 14.
- f. Insert tool into contact cavity until tool tip bottoms against contact shoulder. See figure 15.

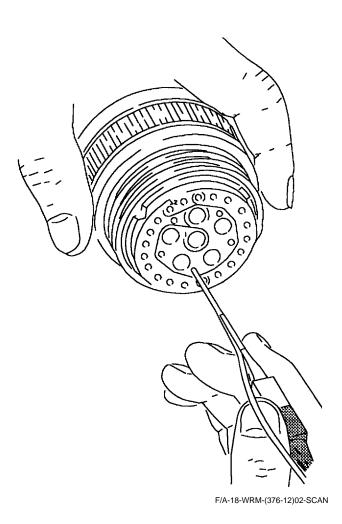


Figure 15. Unlocking Contact Mechanism

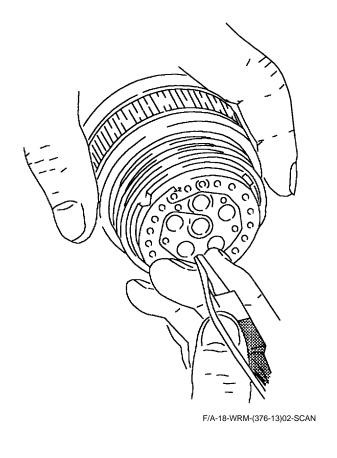
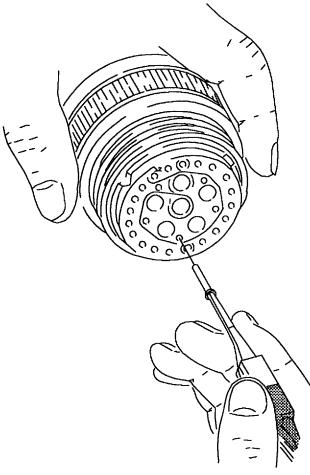


Figure 14. Removal Tool on Wire

g. Hold wire and tool and pull straight out from contact cavity. See figure 16.



F/A-18-WRM-(376-14)02-SCAN

Figure 16. Removing Contact from Connector

18. UNWIRED CONTACT REMOVAL FROM CONNECTOR.



To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, vac battery voltage exists in some wiring.

a. If backshell requires disassembly do the substeps below:

- (1) Determine correct connector data figure number from the Reference Designation to Figure Number Index within this work package.
- (2) To remove boot and backshell from connector, refer to backshell work package listed in Reference Work Package column of Reference Designation to Backshell Data Index.
- b. Select unwired removal tool(s) specified in table 1 Tool Data in the correct connector data figure number. The connector data figure number is found by locating the reference designation in the Reference Designation to Figure Number Index within this work package.



Damage may occur if contact removal tool is tilted or misaligned when in connector insert.

c. Align unwired removal tool, at the rear and at a right angle to connector, with contact to be removed.

WARNING

Isopropyl alcohol is highly flammable. Do not use near open flame or sparks. Use only in well ventilated areas.

d. Isopropyl alcohol may be used as a lubricant for removal of contacts. Apply by brushing on connector insert grommet face or by dipping tool.

- e. Insert unwired removal tool tip into contact cavity until it bottoms in contact cavity and release contact retention mechanism. See figure 17.
- f. Grip tool and withdraw unwired removal tool and contact from rear of the connector. See figure 18.

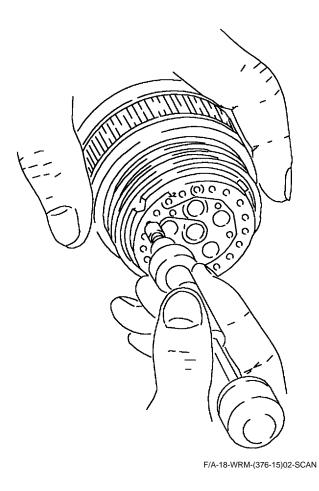


Figure 17. Unlocking Contact
Retention Mechanism with Unwired
Contact Removal Tool

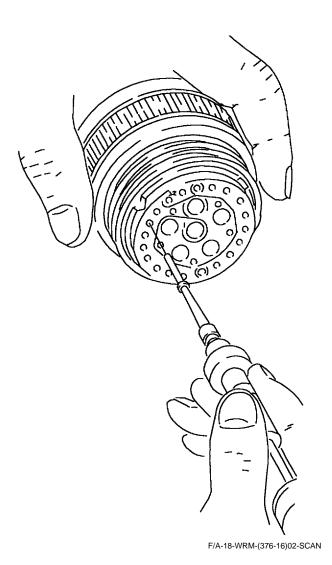


Figure 18. Extracting Contact from Connector

g. Remove contact by holding unwired removal tool and press plunger forward.

19. BROKEN WIRE CONTACT REMOVAL FROM CONNECTOR.

CAUTION

To prevent damage to aircraft wiring or equipment, disconnect both the utility battery and the emergency battery. Refer to A1-F18AC-420-300, WP019 00 and WP020 00. When electrical power is off, vac battery voltage exists in some wiring.

- a. If backshell requires disassembly, do the substeps below:
- (1) Determine correct connector data figure number from the Reference Designation to Figure Number Index within this work package.
- (2) To remove boot and backshell from connector, refer to backshell work package listed in Reference Work Package column of Reference Designation to Backshell Data Index.
- b. Remove hardware from rear of connector and slide back over wire bundle.
- c. Select removal tool specified in table 1 for affected connector part number.

WARNING

Isopropyl alcohol is highly flammable. Do not use near open flame or sparks. Use only in well ventilated areas.

- d. Isopropyl alcohol may be used as a lubricant for removal of contacts. Apply by brushing on connector insert grommet face or by dipping tool.
- e. Insert tip of removal tool 1/8-inch into cavity at rear of connector.



Wire strands may be encountered at any point during tool insertion. Do not jam wire strands in contact cavity. Withdraw removal tool anytime during insertion when it cannot be advanced into connector using these procedures. Inspect tool tip for nicks, cracks, mushrooming and other damage that will prevent its functioning. Replace removal tool and repeat procedure if required.

f. Carefully insert removal tool into contact cavity in 1/16-inch increments, releasing tool after each increment if resistance is felt.

g. If resistance is felt before removal tool reaches back end of contact withdraw tool slightly, rotate 1/6 of a turn, and reinsert tool. Repeat rotation and insertion procedure until tool passes with minimal additional force and bottoms in contact cavity. See figure 19.

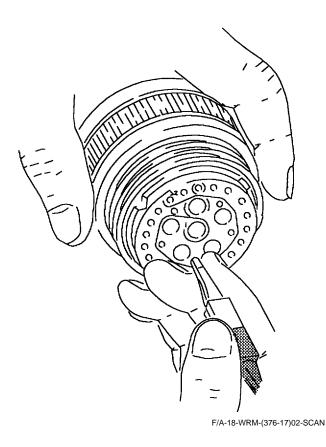


Figure 19. Unlocking Contact Retention Mechanism of Broken Wire Contact

- h. Wiggle removal tool carefully to help it into contact cavity and over contact. Additional rotation may be required if broken strands are encountered.
- i. Continue insert of removal tool until positive stop is felt.
- j. Exert pressure at right angle to connector insert engaging end of contact. Using a mating contact as pusher (if contact does not move, seat removal tool more firmly). See figure 20.

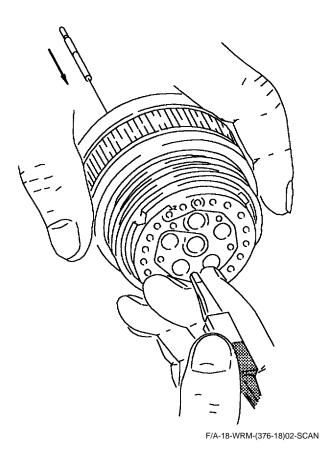
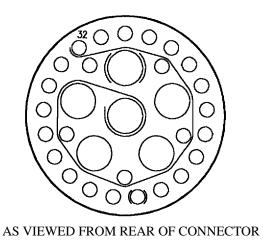


Figure 20. Broken Wire Contact Removal



F/A-18-WRM-(331-1)02-CATI

Reference Designation to Backshell Data Index for M83723-76A2232N Connector

REFERENCE DESIGNATION	BACKSHELL	REFERENCE WORK PACKAGE
64P-E001Q	M85049/52-1-22W	080 00
161353 THRU 161528		

Table 1. Tool Data

ITEM	TOOL NUMBER
Crimp Tool Handle	M22520/1-01
Positioner	M22520/1-02
Crimp Tool Handle	M22520/2-01
Turret Head	M22520/1-02
Insertion Tool (Red)	M81969/14-02
Removal Tool (White)	M81969/14-02
Removal Tool (Unwired)	DRK110-1SA
Removal Tool Probe (Red)	DRK110-20-2

Table 2. Contact Data

CONTACT	STRIP DIMENSION (+1/32 INCH)	CONTACT PART NO.	SEALING PLUG PART NO.
1, 2, 4, 6, 8 and 10 3, 5, 7, 9 AND 11 THRU 32	5/32	48-1226-02 M39029/4-110	MS27488-12 MS31187-20-2

Figure 21. M83723-76A2232N Connector